

BETH C. DRAIN, CA CSR NO. 7152

BEFORE THE
INDEPENDENT CITIZENS' OVERSIGHT COMMITTEE AND THE
APPLICATION REVIEW SUBCOMMITTEE
TO THE
CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE
ORGANIZED PURSUANT TO THE
CALIFORNIA STEM CELL RESEARCH AND CURES ACT
REGULAR MEETING

LOCATION: VIA ZOOM

DATE: JULY 28, 2022
9 A.M.

REPORTER: BETH C. DRAIN, CA CSR
CSR. NO. 7152

FILE NO.: 2022-30

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CLOSED SESSION

NONE

11. DISCUSSION OF CONFIDENTIAL INTELLECTUAL PROPERTY OR WORK PRODUCT, PREPUBLICATION DATA, FINANCIAL INFORMATION, CONFIDENTIAL SCIENTIFIC RESEARCH OR DATA, AND OTHER PROPRIETARY INFORMATION RELATING TO APPLICATIONS SUBMITTED IN RESPONSE TO AGENDA ITEM 6 (HEALTH & SAFETY CODE 125290.30(F) (3) (B) AND (C))

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JULY 28, 2022; 9 A.M.

CHAIRMAN THOMAS: GOOD MORNING, EVERYBODY,
AND WELCOME TO THE JULY MEETING OF THE ICOC AND
APPLICATION REVIEW SUBCOMMITTEE. MARIA, WILL YOU
PLEASE CALL THE ROLL.

MS. BONNEVILLE: HAIFAA ABDULHAQ.

DR. ABDULHAQ: YES.

MS. BONNEVILLE: MOHAMMED ABOUSALEM.

DR. ABOUSALEM: YES.

MS. BONNEVILLE: KIM BARRETT.

DR. BARRETT: PRESENT.

MS. BONNEVILLE: DAN BERNAL. GEORGE
BLUMENTHAL.

DR. BLUMENTHAL: HERE.

MS. BONNEVILLE: MICHAEL BOTCHAN.

DR. BOTCHAN: HERE.

MS. BONNEVILLE: LINDA BOXER.

DR. BOXER: PRESENT.

MS. BONNEVILLE: LEONDRA CLARK-HARVEY.

DR. CLARK-HARVEY: PRESENT.

MS. BONNEVILLE: ANNE-MARIE DULIEGE.

DR. DULIEGE: PRESENT.

MS. BONNEVILLE: YSABEL DURON.

MS. DURON: PRESENT.

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1 MS. BONNEVILLE: MARK FISCHER-COLBRIE.
2 DR. FISCHER-COLBRIE: HERE.
3 MS. BONNEVILLE: FRED FISHER.
4 DR. FISHER: HERE.
5 MS. BONNEVILLE: ELENA FLOWERS. JUDY
6 GASSON.
7 DR. GASSON: HERE.
8 MS. BONNEVILLE: LARRY GOLDSTEIN.
9 DR. GOLDSTEIN: HERE.
10 MS. BONNEVILLE: DAVID HIGGINS.
11 DR. HIGGINS: HERE.
12 MS. BONNEVILLE: STEPHEN JUELSGAARD. RICH
13 LAJARA.
14 MR. LAJARA: HERE.
15 MS. BONNEVILLE: PAT LEVITT.
16 DR. LEVITT: HERE.
17 MS. BONNEVILLE: DAVID LO.
18 DR. LO: HERE.
19 MS. BONNEVILLE: LINDA MALKAS. SHLOMO
20 MELMED.
21 DR. MELMED: HERE.
22 MS. BONNEVILLE: CHRISTINE MIASKOWSKI.
23 DR. MIASKOWSKI: GOOD MORNING.
24 MS. BONNEVILLE: LAUREN MILLER-ROGEN.
25 ADRIANA PADILLA.

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1 DR. PADILLA: HERE.
2 MS. BONNEVILLE: JOE PANETTA. AL ROWLETT.
3 MR. ROWLETT: HERE.
4 MS. BONNEVILLE: BARRY SELICK.
5 DR. SELICK: HERE.
6 MS. BONNEVILLE: MARVIN SOUTHARD.
7 DR. SOUTHARD: HERE.
8 MS. BONNEVILLE: MICHAEL STAMOS.
9 DR. STAMOS: HERE.
10 MS. BONNEVILLE: JONATHAN THOMAS.
11 CHAIRMAN THOMAS: HERE.
12 MS. BONNEVILLE: ART TORRES.
13 MR. TORRES: PRESENT.
14 MS. BONNEVILLE: KRISTINA VUORI.
15 DR. VUORI: HERE.
16 MS. BONNEVILLE: KAROL WATSON.
17 J.T., WE HAVE A QUORUM.
18 CHAIRMAN THOMAS: THANK YOU VERY MUCH,
19 MARIA.
20 WE'LL START WITH THE CHAIR'S REPORT.
21 COUPLE OF THINGS ON THAT. JUST WANTED TO TELL
22 MEMBERS OF THE BOARD THAT I SPENT TUESDAY THROUGH
23 THURSDAY DOWN IN SAN DIEGO AT OUR FIRST IN-PERSON
24 BRIDGES CONFERENCE SINCE 2019 AND CAN REPORT TO THE
25 BOARD THAT THERE WAS JUST A TREMENDOUS LEVEL OF

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1 ENTHUSIASM ON THE PART OF ALL THE PARTICIPANTS.
2 THEY WERE SO HAPPY TO BE BACK TOGETHER AND THAT, AS
3 ALWAYS, THE AGENDA WAS FIRST-RATE. A NUMBER OF
4 MEMBERS OF THE CIRM TEAM GAVE TALKS. THERE WERE
5 SEVERAL SCIENTIFIC TALKS THAT WERE VERY, VERY
6 INTERESTING, STRAIGHT OUT OF ISSCR, AS WELL AS ON
7 THE THIRD DAY A PAIR OF PANELS, ONE AN ADVOCACY
8 PANEL CHAIRED BY KATIE SHARIFY FROM OUR
9 COMMUNICATIONS TEAM AND FEATURING OUR OWN YSABEL
10 DURON, WHO I'M GOING TO TURN TO IN A SECOND FOR A
11 FEW COMMENTS ON THAT, AND THEN A TERRIFIC SCIENCE
12 COMMUNICATIONS/SOCIAL MEDIA DISCUSSION BY KATIE AND
13 ESTEBAN CORTEZ ALSO FROM OUR COMMUNICATIONS TEAM.

14 AS ALWAYS AT THESE MEETINGS THERE WERE
15 SORT OF SPECIFIC SIDEBAR DISCUSSIONS THAT WERE VERY
16 INTERESTING. ON THE FIRST DAY ONE OF THE Q AND A,
17 AFTER MARIA MILLAN HAD FINISHED HER PRESENTATION,
18 FEATURED A QUESTION OR MORE OF A STATEMENT ACTUALLY
19 FROM A GENTLEMAN FROM HUMBOLDT STATE WHO COMMENTED
20 THAT HE'S GONE OUT IN THE COMMUNITY WHERE HE GOES TO
21 SCHOOL AND TALKED TO PEOPLE ABOUT STEM CELL RESEARCH
22 AND HAS GOTTEN A NUMBER OF, THE WAY HE DESCRIBED IT
23 WAS ANGRY RESPONSES AND QUESTIONING ABOUT THE
24 VALIDITY OF IT AND COMMENTS ABOUT STEM CELL CLINICS.
25 AND ON SORT OF FURTHER PRESSING, HE DISCOVERED THAT

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1 MOST OF THESE PEOPLE GOT THEIR INFORMATION ON STEM
2 CELL TECHNOLOGY FROM JOE RHOGAN.

3 AND SO WE HAD AT THE DINNER AFTERWARDS,
4 KATIE AND ESTEBAN AND I HAD A MORE LENGTHY
5 DISCUSSION WITH HIM. HE SAID IT WAS JUST REALLY
6 INTERESTING THAT THERE'S EVEN NOW THIS MANY YEARS
7 INTO CIRM THERE ARE STILL MANY PEOPLE OUT THERE THAT
8 HAVE MISCONCEPTIONS ABOUT THE VALUE OF STEM CELL
9 RESEARCH AND INDEED STILL HAVE OPPOSITION TO IT.
10 AND SORT OF DROVE HOME THE REAL VALUE OF OUR EVER
11 INCREASING EMPHASIS ON COMMUNICATION TO THE PUBLIC.
12 SO THAT WAS ONE THING I THOUGHT WAS VERY
13 INTERESTING.

14 THE SECOND THING WAS I ALWAYS LIKE TO AT
15 THESE DINNERS GO AROUND, AS DID ALL THE MEMBERS OF
16 THE CIRM TEAM, SIT WITH THESE KIDS AND THE FOLKS WHO
17 RUN THEIR PROGRAMS. AND ONE GROUP I HAPPENED TO SIT
18 DOWN BY COINCIDENCE WAS THE BERKELEY CITY COLLEGE
19 GROUP AND CHATTED WITH THEM, FIVE OR SIX MEMBERS IN
20 THEIR COHORT, CHATTED WITH THEM ABOUT WHAT THEY WERE
21 DOING.

22 AND THEN THE NEXT MORNING HAD OCCASION TO
23 TALK TO THE WOMAN WHO RUNS THAT PROGRAM, AND I
24 DESCRIBE THIS BECAUSE IT'S INTERESTING. SHE
25 COMMENTED TO ME HOW -- AND SOME OF YOU MAY RECALL

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1 WHEN THESE PROGRAMS WERE UP FOR CONSIDERATION AND
2 APPROVAL BY THE BOARD, BERKELEY CITY COLLEGE'S
3 PROGRAM WAS NOT RECOMMENDED FOR FUNDING. THEY WERE
4 JUST BELOW THE FUNDING LINE PRINCIPALLY BECAUSE,
5 AMONG OTHER THINGS, THEY HADN'T BEEN IN THE MOST
6 RECENT LOOP OF AWARDS.

7 IN PROGRAMMATIC REVIEW WE COMMENTED THAT,
8 GIVEN THAT THERE'S SO MANY FINE STUDENTS AT THAT
9 FACILITY AND THAT THEY WOULD BENEFIT GREATLY FROM
10 HAVING THE PROGRAM, WE DECIDED TO ELEVATE BERKELEY
11 CITY COLLEGE TO THE PROGRAMS THAT WERE RECOMMENDED
12 FOR FUNDING. AND SHE WAS PROFUSE IN HER THANKS TO
13 THE BOARD ABOUT THAT AND JUST SAID THAT IT MEANT THE
14 WORLD TO THESE KIDS WHO WERE IN THE PROGRAM, THAT
15 THEY'VE DONE FANTASTIC WORK. AND SO I JUST BRING
16 THIS TO THE BOARD'S ATTENTION BECAUSE IT SPEAKS TO
17 THE VALUE OF PROGRAMMATIC REVIEW IN THINGS THAT WE
18 CONSIDER IN OUR DISCUSSIONS FROM TIME TO TIME.

19 THE POSTERS AT THIS -- IF YOU'VE NEVER HAD
20 A CHANCE TO BE AT ONE OF THESE SESSIONS OR THE SPARK
21 PROGRAM, OUR HIGH SCHOOL END-OF-YEAR EVENT, WHICH IS
22 NEXT WEEK, THE POSTERS THAT THESE KIDS PUT TOGETHER
23 TO DESCRIBE THEIR WORK ARE JUST FANTASTIC IN THEIR
24 LEVEL OF COMPLEXITY AND DETAIL AND SOPHISTICATION.
25 AND THE TREMENDOUS LEVEL OF ENTHUSIASM THAT THEY

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1 HAVE FOR HAVING HAD THE EXPERIENCE OVER THE PAST
2 YEAR WOULD STRONGLY RECOMMEND IN FUTURE YEARS, IF
3 YOU GET A CHANCE, TO GO TO ONE OF THESE END-OF-YEAR
4 MEETINGS BECAUSE THEY'RE SO WORTH SEEING WHAT THE
5 RESULT IS OF THIS PROGRAM.

6 SO THE OTHER THING JUST WANTED TO, AS I
7 SAID, ON THIS ADVOCACY PANEL THAT FEATURED YSABEL,
8 WANTED TO JUST GIVE HER A COUPLE MINUTES HERE TO
9 MAKE A FEW COMMENTS BECAUSE I THOUGHT THAT THAT
10 PANEL WAS TERRIFICALLY RECEIVED BY THE AUDIENCE AND
11 VERY VALUABLE. YSABEL, IF YOU COULD JUST GIVE A FEW
12 WORDS PLEASE.

13 MS. DURON: THANKS, J.T. I WANT TO ADD I
14 ALSO HEARD FROM THE DIRECTOR AT BERKELEY COLLEGE.
15 AND ONE OF THE THINGS I LEARNED WAS THAT THAT IS A
16 HISPANIC-SERVING INSTITUTION. AND SO SHE WAS
17 REMINDING ME THAT MANY OF THOSE ARE PEOPLE WHO ARE
18 30 YEARS OLD AND ABOVE WHO LEFT SCHOOL AND ARE
19 COMING BACK IN AN ATTEMPT TO MOVE FORWARD WITH THEIR
20 ABILITY TO BE EMPLOYED AND TO, IN THIS CASE, FOLLOW
21 SCIENCE. SO I WAS REALLY THRILLED THAT SHE WAS
22 THRILLED, AND I'M SO GLAD THAT WE, THE BOARD, WERE
23 ABLE TO SEE ABOVE AND BEYOND JUST SCORES AND TO
24 RECOGNIZE THAT THE HUMANS BEHIND THIS ARE GOING TO
25 BE ABLE TO MAKE A DIFFERENCE GOING FORWARD AND WHO

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1 COME FROM THESE COMMUNITIES THAT WE TALK ABOUT WHEN
2 WE TALK ABOUT INCLUSIVITY. SO I WAS THRILLED TO
3 HEAR FROM HER.

4 ABOUT THE PANEL ITSELF, THERE WERE ABOUT
5 125 STUDENTS IN THE ROOM, BOTH UNDERGRADUATE AND
6 MASTER'S, AND SOME WITH TERRIFIC SKILL SETS AND
7 TRAINING. AS J.T. MENTIONED, THE POSTERS, I WENT
8 AROUND LOOKING AT ALL OF THEM. AND I SAID TO A FEW
9 OF THEM, I CAN'T EVEN PRONOUNCE THE NAMES OF SOME OF
10 THE HEADINGS, SO THE SCIENCE IS WAY ABOVE MY PAY
11 GRADE, BUT CONGRATULATIONS FOR SUCH WONDERFUL WORK.

12 ONE OF THE THINGS I DID DO AS I KIND OF
13 VEER AROUND WHAT I WANTED TO SAY WAS THAT I ASKED
14 THEM, "HOW DO I KNOW TO GO BACK TO MY COMMUNITY AND
15 EXPLAIN TO THEM THAT THEY'RE INCLUDED IN THIS
16 RESEARCH AND THAT THIS MIGHT HELP THEM OR A LOVED
17 ONE DOWN THE ROAD? SO DID YOU, IN YOUR STEM CELL
18 LINE, KNOW THE VARIETY AND THE INCLUSION OF
19 DIFFERENT COMMUNITIES WHOSE STEM CELLS WERE PULLED
20 OUT?" AND IT WAS, AS I SAID, BEING SCIENTIFICALLY
21 IGNORANT AT SOME LEVEL, I WASN'T SURE THAT, IN FACT,
22 THAT SHOULD AND COULD APPLY. BUT THEY REALLY GOT
23 VERY THOUGHTFUL ABOUT IT, AND SOME OF THEM EVEN
24 EXPRESSED THAT THEY DID HAVE SOME QUESTIONING ABOUT
25 THAT. I SAID, "WELL, PUSH. WHEN YOU'RE IN THE LAB,

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1 PUSH, ASK, DEMAND TO KNOW, DON'T JUST ACCEPT WHAT
2 IS." THAT WAS ONE OF MY SIDE CONVERSATIONS.

3 THE ADVOCACY PANEL ITSELF WAS THREE OF US,
4 AND IT GAVE THE STUDENTS A REAL DIFFERENT PERCEPTION
5 ABOUT WHAT PATIENT ADVOCACY LOOKS LIKE. TWO OF US,
6 OF COURSE, ADVOCATE SOMEWHAT WITH THE EXPERIENCE OF
7 BOTH CANCER AND PARKINSON'S. NANCY RENE FROM SICKLE
8 CELL FOUNDATION BECAUSE HER GRANDSON WAS BORN WITH
9 SICKLE CELL, AND SHE BECAME A VERY STRONG ADVOCATE
10 AND HAS BEEN ENGAGED FOR 19 YEARS. THE EXCITING
11 PART FOR JENNIFER ROBB IS THAT SHE'S ENGAGED IN
12 DEVELOPING LAB AND CLINICAL TRIALS, SOMETHING THAT'S
13 SOMEWHAT NEW TO THE WORK SHE'S DOING, BUT VERY
14 EXCITING, AND ALSO DEVELOPING A WELLNESS CENTER FOR
15 PARKINSON'S BECAUSE OF THE NEED TO CENTER RESOURCES
16 FOR THE COMMUNITY WHO HAVE TO DEAL WITH PARKINSON'S
17 AT ONE LEVEL OR ANOTHER. THESE ARE WONDERFUL THINGS
18 FOR BUDDING SCIENTISTS TO HEAR. OF COURSE, I TALK
19 MY ENGAGEMENT ACROSS THE CANCER SPACE, FROM BOTH
20 ENGAGEMENT OF LATINO CANCER SERVICE AGENCIES TO
21 ENGAGEMENT IN RESEARCH THROUGH POLICY DEVELOPMENT.

22 THE THING THAT STRUCK ME, AND ONE OF THE
23 STUDENTS GOT UP AND SAID IT WAS ONE OF THE BETTER
24 PANELS IN THE WHOLE SCIENCE MEETING, WHICH WAS
25 INTERESTING TO ME, BUT I THINK IT'S BECAUSE IT

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1 SPEAKS TO THEIR HEART AND GIVES THEM THE REASON
2 BEHIND WHY THEY DO THE SCIENCE AND WHY IT'S REALLY
3 ABOUT THE PEOPLE BEHIND THE SCIENCE.

4 AND SO ONE OF THE THINGS, J.T., THAT
5 STRUCK ME WAS THAT A LOT OF LATINO STUDENTS CAME TO
6 ME. SOME OF THEM GOT UP DURING THE EVENT, BUT A LOT
7 OF THEM CAME TO ME INDIVIDUALLY. AND WHAT I HEARD
8 WAS NOT JUST THEIR ENTHUSIASM FOR THEIR WORK, BUT I
9 ALSO HEARD THE CULTURAL CONFLICT BECAUSE THEY ALSO
10 HAD TO DEAL WITH FAMILY ON MULTIPLE LEVELS,
11 SOMETIMES ACTUALLY IN CONFLICT WITH FAMILY WHO
12 SOMETIMES DIDN'T UNDERSTAND THE DEDICATION IT TOOK
13 TO BECOME THE SCIENTIST OR EVEN THE BURDEN OF
14 BECOMING THE SCIENTIST AND THE COSTS AND THE OTHER
15 THINGS THAT THEY HAVE TO GIVE UP IN ORDER TO DO IT.

16 AND I HOPE THAT I'VE GIVEN THEM PEP TALKS
17 AND SOME GUIDANCE. AND IT WAS SAID TO ME, J.T., I
18 SAID I SHOULD DO THIS KIND OF REGULARLY WITH THESE
19 STUDENTS, JUST HAVE THEM COME UP IN A WEBINAR AND
20 SIT AROUND AND HAVE THESE CONVERSATIONS. AND I
21 THOUGHT MAYBE ALL OF US SHOULD DO THIS AT ONE WAY OR
22 THE OTHER, THAT WE PARTICIPATE OR OFFER TO
23 PARTICIPATE. I WOULD ENCOURAGE EVERY ONE OF YOU, IF
24 YOU HAVEN'T HAD AN OPPORTUNITY TO GO TO ONE OF THESE
25 SESSIONS WITH THESE STUDENTS, I'M SURE EACH OF YOU

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1 COULD BE A WONDERFUL MODEL BECAUSE SOMETIMES THE LAB
2 IS THE LAB, BUT IT'S THAT EXTERNAL RELATIONSHIP THAT
3 CAN HELP THEM GO BACK INTO THE LAB AND CONTINUE TO
4 SUCCEED AND TO FEEL HEARD AND TO FEEL NURTURED AND
5 TO FEEL THAT SOMEONE REALLY GETS WHO THEY ARE AND
6 WHERE THEY'RE COMING FROM.

7 THIS, I THINK, IS WHAT'S GOING TO KEEP
8 THEM FIGHTING, WHATEVER THEY HAVE TO DEAL WITH IN
9 THE LONG RUN, AND KEEP THEM CENTERED ON BECOMING
10 THOSE SCIENTISTS OF THE FUTURE. SO I REALLY
11 ENCOURAGE YOU ALL TO BE ABLE TO HAVE AN OPPORTUNITY
12 TO PARTICIPATE. AND, J.T., I'M SORT OF OFFERING
13 MYSELF TO HAVE, CALL IT, THE CIRCLE OF CIRM TO BRING
14 MAYBE LATINO STUDENTS TOGETHER IN A WEBINAR, NOT TO
15 BE EXCLUSIVE, BUT TO GIVE THEM AN OPPORTUNITY TO
16 SHARE WHAT IT IS THAT MAKES THEM CULTURALLY WHO THEY
17 ARE AND WHY SOMETIMES IT NEEDS TO BE HEARD BY
18 SOMEONE THAT THEY THINK HEARS THEM. THAT WAS MY
19 IMPRESSION, BUT I WAS TOTALLY MOVED BY ALL OF THEM
20 AND BY THEIR COMMITMENTS.

21 CHAIRMAN THOMAS: THANKS SO MUCH, YSABEL.
22 AND I THINK THAT'S A WONDERFUL IDEA. AND WE CAN
23 TAKE THIS UP FURTHER AMONGST OUR COMMUNICATIONS TEAM
24 ON HOW WE MIGHT IMPLEMENT SOME OF THOSE GREAT IDEAS.

25 SO THANKS TO ALL THE MEMBERS OF CIRM WHO

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1 WERE AT THIS MEETING, AND IT WAS WONDERFUL TO SEE
2 EVERYBODY. SOME OF YOU FOR THE FIRST TIME IN PERSON
3 AND MANY, MANY MONTHS FOR THOSE OF US IN SOUTHERN
4 CALIFORNIA.

5 SO THE SECOND THING FROM THE CHAIR'S
6 REPORT, I WANT TO TURN IT OVER TO JUDY GASSON TO
7 GIVE A BIT OF AN UPDATE ON THE CHAIR AND VICE CHAIR
8 SEARCH. JUDY.

9 DR. GASSON: THANK YOU VERY MUCH, CHAIRMAN
10 THOMAS.

11 SO TO REMIND EVERYONE WHERE WE ARE IN THE
12 CHAIR AND VICE CHAIR SEARCH, IN MARCH AND APRIL WE
13 CONDUCTED A SURVEY OF THE BOARD MEMBERS TO GATHER
14 THE INPUT WITH RESPECT TO THE CRITERIA FOR THE CHAIR
15 AND THE VICE CHAIR AND THE SCOPE OF THE POSITIONS.
16 AND THANKS TO ALL OF YOU WHO PARTICIPATED IN THAT
17 SURVEY.

18 IN APRIL AND MAY THE GOVERNANCE
19 SUBCOMMITTEE CONSIDERED THE RESULTS OF THE SURVEY,
20 AND WE PREPARED RECOMMENDATIONS FOR THE BOARD
21 REGARDING THE CRITERIA, THE SCOPE, AND THE PERCENT
22 EFFORT REQUIRED.

23 IN MAY THE BOARD CONSIDERED THE GOVERNANCE
24 SUBCOMMITTEE RECOMMENDATIONS, AND THEY WERE
25 APPROVED.

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1 AND WE ARE NOW IN JULY, AND I'M HAPPY TO
2 REPORT THAT THE GOVERNANCE SUBCOMMITTEE, ON BEHALF
3 OF THE BOARD, HAS REQUESTED THAT THE CONSTITUTIONAL
4 OFFICERS NOMINATE CANDIDATES FOR CHAIR AND VICE
5 CHAIR NO LATER THAN SEPTEMBER 15. THEY'RE NOT
6 REQUIRED TO MEET THIS DEADLINE, BUT WE ARE HOPING TO
7 ENCOURAGE THEM TO MEET THIS DEADLINE TO GIVE US THE
8 OPPORTUNITY IN FUTURE BOARD MEETINGS TO CONSIDER THE
9 NOMINEES.

10 SO IF WE REMAIN ON SCHEDULE, IN SEPTEMBER
11 THE GOVERNANCE SUBCOMMITTEE WILL VET THE NOMINEES
12 AND REQUEST ADDITIONAL INFORMATION AS NECESSARY AND
13 CONDUCT INITIAL INTERVIEWS.

14 AND THEN IN SEPTEMBER, OCTOBER THE FULL
15 BOARD WILL MEET TO CONSIDER THE NOMINEES FOR CHAIR
16 AND VICE CHAIR. AND AT THAT TIME IT WILL INCLUDE
17 PUBLIC PRESENTATIONS BY THE CANDIDATES, CLOSED
18 SESSION INTERVIEWS, AND A PUBLIC VOTE.

19 AND IF EVERYTHING REMAINS ON SCHEDULE, IN
20 JANUARY, ASSUMING WE'VE ELECTED A NEW CHAIR AND A
21 NEW VICE CHAIR IN DECEMBER, THE INDIVIDUALS WILL
22 TAKE THEIR OATH AT THE FIRST BOARD MEETING IN
23 JANUARY OF 2023, PROVIDING AN ORDERLY TRANSITION
24 FROM THE CURRENT CHAIR AND VICE CHAIR TO THE NEW
25 CHAIR AND VICE CHAIR. THANK YOU, CHAIRMAN THOMAS.

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1 CHAIRMAN THOMAS: THANK YOU, JUDY. THANK
2 YOU TO YOU AND CO-CHAIR KRISTINA VUORI AND ALL
3 MEMBERS OF THE GOVERNANCE SUBCOMMITTEE FOR ALL THE
4 WORK YOU'VE PUT IN ON THIS. IT'S BEEN A
5 CONSIDERABLE AMOUNT OVER THE COURSE OF THIS YEAR AND
6 WILL CONTINUE TO BE.

7 ONE COMMENT I WOULD LIKE TO ASK THE BOARD,
8 ALL OF YOU, IF YOU HAVE ANY CANDIDATES FOR EITHER
9 POSITION THAT YOU THINK MIGHT CONSIDER THROWING
10 THEIR HATS INTO THE RING, I WOULD STRONGLY ENCOURAGE
11 YOU TO TALK TO THOSE PEOPLE BECAUSE, BETWEEN ALL THE
12 MEMBERS OF THE BOARD, WE HAVE VERY EXTENSIVE REACH.
13 AND IT'S PERHAPS THE BEST WAY TO GET TO POTENTIAL
14 CANDIDATES. SO PLEASE THINK ABOUT THAT AS WE MOVE
15 FORWARD HERE, NOTING THAT JUDY SAID THAT WE ARE
16 TRYING TO GET THE CONSTITUTIONAL OFFICERS TO MAKE
17 THEIR NOMINATIONS BY SEPTEMBER 15TH. SO TIME IS
18 BEGINNING TO GET OF THE ESSENCE HERE, PARTICULARLY
19 AS WE APPROACH AUGUST AND ANY VACATION TIME AND ALL
20 THAT SORT OF THING. SO THANK YOU VERY MUCH IN
21 ADVANCE FOR THAT.

22 OKAY. SO THAT CONCLUDES THE CHAIR'S
23 REPORT.

24 MS. BONNEVILLE: J.T., I JUST WANTED TO
25 ADD ONE THING. WE POSTED THE PRESENTATION WHERE IT

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1 OUTLINES CRITERIA AND QUALIFICATIONS AND WHAT WE ARE
2 LOOKING FOR TO OUR WEBSITE UNDER THE JOB POSTING.
3 SO IF ANY OF YOU NEED TO REFERENCE THAT, YOU CAN
4 SEND THAT LINK OUT. I'M HAPPY TO SEND IT TO YOU IF
5 YOU'D LIKE ME TO.

6 CHAIRMAN THOMAS: YES. MARIA, COULD JUST
7 PREEMPTIVELY DO THAT TO ALL MEMBERS OF THE BOARD
8 PLEASE?

9 MS. BONNEVILLE: NO PROBLEM.

10 CHAIRMAN THOMAS: THANK YOU. OKAY. NEXT
11 WE WILL MOVE ON TO THE PRESIDENT'S REPORT. DR.
12 MILLAN.

13 DR. MILLAN: THANK YOU, CHAIRMAN THOMAS.
14 DR. CREASEY, WOULD YOU KINDLY SHARE THE SLIDES?
15 IT'S A WONDERFUL OPPORTUNITY FOR US TO GIVE YOU SOME
16 UPDATES TODAY, BUT ALSO YOU'LL BE GETTING PRESENTED
17 TO YOU SOME ACTION ITEMS AND REQUESTS FROM THE CIRM
18 TEAM. SO THE PRESENTATION IS ABOUT TO COME UP. I
19 THINK, ABLA, MAYBE AT THE BARGAINING OF THAT. ARE
20 YOU ABLE TO SHARE? IF NOT, DOUG GUILLEN, IF YOU
21 WOULDN'T MIND JUST POSTING THE PDF, THAT WOULD BE
22 GREAT.

23 MS. BONNEVILLE: ABLA IS ON MUTE, BUT I
24 THINK SHE WOULD LIKE TO SHARE THE SLIDES.

25 DR. MILLAN: SHE'S JUST NOT ABLE TO GET TO

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1 MINE. SHE JUST HAS HERS AT THIS POINT.

2 I WANTED TO OPEN THE PRESENTATION BY KIND
3 OF ALSO REINFORCING THE MAGIC THAT OCCURRED DURING
4 THE BRIDGES MEETING THAT YSABEL AND J.T. HAD COVERED
5 SO NICELY. I WANT TO THANK KELLY SHEPARD, WHO'S OUR
6 SCIENTIFIC OFFICER WHO REALLY HEADED THIS PROGRAM.
7 AND IT WAS VERY SPECIAL IN THAT WE HAD AN
8 OPPORTUNITY TO MEET STUDENTS. AND BASICALLY A
9 RUNNING THEME WAS THEY DIDN'T KNOW THAT IT WAS
10 POSSIBLE FOR THEM GIVEN WHERE THEY CAME FROM, WHAT
11 THEIR BACKGROUND WAS OR INTERESTS, AND THAT WAS VERY
12 TOUCHING.

13 SO HERE I AM WITH THE PRESIDENT'S REPORT.
14 NEXT SLIDE PLEASE. MY PRESIDENT'S REPORT WILL BE
15 VERY SHORT BECAUSE, IN THE LAST MEETING JUST LAST
16 MONTH, I HAD THE OPPORTUNITY TO PROVIDE A VERY
17 EXTENSIVE UPDATE ON WHERE WE ARE. BUT SUFFICE IT TO
18 SAY THAT OUR MISSION IS BEATING STRONG IN TERMS OF
19 THE PROGRESS WE ARE MAKING, OUR MISSION TO
20 ACCELERATE WORLD-CLASS SCIENCE TO DELIVER
21 TRANSFORMATIVE REGENERATIVE MEDICINE TREATMENTS IN
22 AN EQUITABLE MANNER TO A DIVERSE CALIFORNIA AND
23 WORLD. WE ARE LIVING AND EXECUTING ON EVERY SINGLE
24 WORD IN THIS MISSION, AND YOU KNOW THAT BECAUSE YOU
25 HAVE BEEN THERE ALONGSIDE US, OUR BOARD MEMBERS, AND

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1 KEY ADVISORS. NEXT SLIDE PLEASE.

2 SO AS YOU RECALL, OUR STRATEGIC PLAN IS
3 ARRANGED IN THESE THREE PILLARS OR THREE THEMATIC
4 THEMES OR THREE STRATEGIC THEMES. IN THE LAST
5 MEETING WE WERE ABLE TO UPDATE YOU ON SOME AMAZING
6 KINDS OF COLLABORATIONS WITH OTHER GROUPS SUCH AS
7 THE FOUNDATION FOR NIH, NIH, INDUSTRY, AND FDA
8 THROUGH THE BESPOKE GENE THERAPY CONSORTIUM. OUR
9 PARTNERSHIP WITH THE HEART, LUNG, BLOOD INSTITUTE
10 FOR OUR SICKLE CELL PROGRAM IS ALSO BEATING STRONG.

11 WE HAVE CONCEPTS UNDER DEVELOPMENT THAT
12 WILL BE BROUGHT TO THE BOARD IN THE UPCOMING
13 MEETINGS REGARDING INFRASTRUCTURE AND PROGRAMS THAT
14 WILL CONNECT THE SCIENTIFIC COMMUNITY AND PROMOTE
15 TEAM SCIENCE. ALL OF THESE THEMES, BY THE WAY,
16 EMBED INTO THEM DIVERSITY, EQUITY, AND INCLUSION
17 PRINCIPLES, AND WE DON'T JUST USE THE TERMINOLOGY.
18 IT ALMOST SEEMS TOO SUCCINCT TO CALL IT DEI FOR
19 SHORTHAND, BUT WE ARE TRULY EXECUTING ON THAT. YOU
20 WILL SEE THAT AND YOU WILL HAVE AN UPDATE ON THAT IN
21 UPCOMING MEETINGS IN TERMS OF PROVIDING OPPORTUNITY
22 FOR ALL.

23 YOU HAVE HEARD ABOUT THE BRIDGES MEETING,
24 WHICH IS REALLY A SNAPSHOT OF HOW WE HAVE ALREADY
25 BEEN IMPACTING ACCESS TO THE COMMUNITY, TO

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1 UNDERSERVED COMMUNITIES, UNDERREPRESENTED GROUPS FOR
2 EDUCATION PROGRAMS. AND IN THE UPCOMING MEETING IN
3 AUGUST OR SEPTEMBER, I BELIEVE, YOU WILL HEAR
4 RECOMMENDATIONS TO FUND ADDITIONAL EDUCATION
5 PROGRAMS WHERE A KEY FEATURE IS MENTORSHIP OF THESE
6 UNDERREPRESENTED STUDENT GROUPS WITHIN THE
7 UNIVERSITY SYSTEM. SO THAT'S EXTREMELY EXCITING.

8 ALL THE EDUCATION PROGRAMS TOGETHER, ALONG
9 WITH OUR SCIENTIFIC PROGRAMS, WE ARE PROVIDING WAYS
10 THAT WE CAN INTERCONNECT THESE PROGRAMS SO THAT
11 THERE IS THE OPPORTUNITY TO EMPOWER ALL THE PROGRAMS
12 TOWARD ACCOMPLISHING THEIR MISSION, AND YOU WILL
13 CONTINUE TO SEE THAT IN UPCOMING MEETINGS AS WE
14 REPORT ON THESE PROGRAMS.

15 NOW, JUST A CENTERPIECE HERE IN TERMS OF
16 DELIVERING REAL-WORLD SOLUTIONS, THAT IS BASICALLY
17 THE MAJOR THEME THAT WE WILL REPORT ON TODAY. NEXT
18 SLIDE PLEASE.

19 SO THE STRATEGIC PLAN AND ACTION IN THIS
20 PARTICULAR THEMATIC PILLAR IN DELIVERING REAL-WORLD
21 SOLUTIONS, WE'RE GOING TO START OFF WITH AN AMAZING
22 PORTFOLIO UPDATE FROM DR. ABLA CREASEY, OUR HEAD OF
23 THERAPEUTICS DEVELOPMENT. SHE WILL GIVE YOU AN
24 UPDATE ON HOW WE ARE ACCELERATING AND ADVANCING
25 SCIENCE TOWARD THE CLINICS, EMBEDDING WITH IT THE

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1 PRINCIPLES OF DEI, EMBEDDING THE IDEA OF TEAM
2 SCIENCE, BUT ALSO ADVANCING THE REGULATORY PARADIGM,
3 AS WELL AS TEEING IT UP SO YOU WILL HEAR HOW THIS
4 PLAYS INTO -- I'M SORRY. OKAY. SOMEBODY ELSE'S
5 SLIDE IS SHOWING. APPROVED AND PAID ARE NICE WORDS,
6 SO THEY'RE VERY INSPIRING, BUT THEY'RE ON THE SLIDE
7 NOT RELATED TO THIS PRESENTATION, AND BY NO MEANS A
8 HINT.

9 FOR BOARD CONSIDERATION, BY THE WAY, YOU
10 WILL HEAR TODAY FROM DR. SAMBRANO A RECOMMENDATION
11 FOR AN ADDITIONAL CLINICAL TRIAL PROGRAM WHICH WOULD
12 BRING US UP TO 81 CLINICAL TRIALS DIRECTLY FUNDED BY
13 CIRM. THIS IS INCREDIBLE CELL/GENE THERAPY, OFTEN
14 FIRST-IN-HUMAN CLINICAL TRIALS. AND, AGAIN, YOU
15 WILL HEAR ABOUT THAT PORTFOLIO FROM DR. CREASEY.

16 AND THEN THE THIRD THING FOR BOARD
17 CONSIDERATION, DR. SHYAM PATEL WILL PRESENT A
18 CONCEPT FOR APPROVAL FOR MANUFACTURING PARTNERSHIP
19 THAT'S INTENDED TO OVERCOME THE HURDLES TO
20 COMMERCIALIZATION AND BRINGING THE SCIENCE OUT TO
21 THE COMMUNITIES. MANY OF YOU HAVE BEEN INVOLVED IN
22 THE SHAPING OF THIS PROPOSAL. MANY OF YOU HAVE BEEN
23 INVOLVED IN THE MULTIPLE MEETINGS AND WORKSHOPS
24 ALONG WITH THE VARIOUS ACADEMIC AND INDUSTRY
25 STAKEHOLDERS TO SHAPE THIS PROPOSAL OVER THE YEARS.

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1 AND WE ARE VERY EXCITED TO PRESENT THAT TODAY.

2 NEXT SLIDE PLEASE. AND SO I GET TO
3 INTRODUCE DR. ABLA CREASEY, WHO'S OUR VP OF
4 THERAPEUTICS DEVELOPMENT, WHO WILL BE GIVING AN
5 UPDATE ON OUR PORTFOLIO, REALLY DEMONSTRATING HOW
6 THE STRATEGIC PLAN IS JUST WHERE IT NEEDS TO BE IN
7 ORDER TO PUSH THE MISSION OF BRINGING MORE OF THESE
8 PROGRAMS FROM THE SCIENCE TO THE BEDSIDE, FROM THE
9 BENCH TO THE BEDSIDE. DR. CREASEY.

10 DR. CREASEY: THANK YOU, DR. MILLAN, MR.
11 CHAIRMAN, BOARD MEMBERS, CIRM COLLEAGUES, AND THE
12 PUBLIC. THE GOAL OF MY TALK TODAY IS TO FAMILIARIZE
13 YOU WITH THE CIRM CLINICAL PORTFOLIO WITH EMPHASIS
14 ON RARE DISEASE DEVELOPMENT.

15 SO OVERVIEW OF OUR CLINICAL PORTFOLIO
16 METRICS IS SHOWN HERE. CAN YOU SEE MY SLIDES, BY
17 THE WAY? SO ADVANCING THERAPIES TO MARKETING
18 APPROVAL, THIS WILL BE TODAY'S FOCUS. 106
19 PROGRESSION EVENTS TO DATE THAT INCLUDE PROJECTS
20 THAT ADVANCE FROM ONE GRANT TO ANOTHER, SUCH AS FROM
21 DISCOVERY TO TRANSLATION OR TRANSLATION TO CLINICAL.
22 THAT'S WHAT WE CALL PROGRESSION EVENTS. 14 CLINICAL
23 AWARDS THAT INCLUDE CLIN1 AND CLIN2 SINCE THE
24 PASSAGE OF PROPOSITION 14 WITH 35 PERCENT OF THEM IN
25 THE AREA OF NEUROLOGY. 15 DRUG CANDIDATES WITH

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1 ACCELERATED FDA DESIGNATIONS. THE ADVANTAGE OF THAT
2 IS IT ALLOWS THE GRANTEES TO HAVE THE OPPORTUNITY TO
3 HAVE MORE FREQUENT INTERACTIONS WITH THE FDA, AND
4 THAT OFTEN IS HELPFUL TO ADVANCE THE PROGRAMS. 81
5 CLINICAL TRIALS INCLUDING TODAY'S PROPOSED AWARD.

6 THE CLINICAL PORTFOLIO TODAY IS RICH WITH
7 SEVERAL DISEASE AREAS AS YOU SEE ON THE Y AXIS. WE
8 HAVE DIABETES, WE HAVE HEART DISEASE, WE HAVE
9 HIV/AIDS, AND NEURO. AND THE PIE CHART DISPLAYS
10 THAT NEUROLOGICAL AND BLOOD DISEASES PLAY A
11 PROMINENT ROLE IN THE PORTFOLIO. REMEMBER, WE
12 ACCEPT GRANTS. WE DO NOT NECESSARILY PICK THE
13 GRANTS WHEN WE RECRUIT THEM. SO 26 PERCENT OF OUR
14 R & D PORTFOLIO AS OF TODAY IS IN THE AREA OF NEURO.

15 CIRM HAS THUS FAR INVESTED \$2.68 BILLION
16 IN R & D WITH 1.1 BILLION IN CLINICAL DEVELOPMENT.
17 AS SHOWN ON THIS SLIDE, HERE WE HAVE 53 PERCENT OF
18 THE CLINICAL GRANTS ARE IN THE AREA OF RARE
19 DISEASES.

20 HERE ARE BRIEF FACTS ABOUT RARE DISEASES.
21 I'M SURE YOU KNOW A LOT OF THEM, BUT I THOUGHT I'LL
22 JUST REMIND YOU. THERE ARE OVER 7,000 RARE DISEASES
23 OR CONDITIONS THAT EACH AFFECT FEWER THAN 200,000
24 PEOPLE IN THE UNITED STATES. RARE DISEASES ARE
25 OFTEN SERIOUS AND LIFE THREATENING. CURRENTLY 25 TO

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1 30 MILLION AMERICANS LIVE WITH A RARE DISEASE. THE
2 ECONOMIC BURDEN TO THE U.S. CAN BE AS HIGH AS ONE
3 TRILLION. AS YOU SEE HERE, IN 2019 THAT WAS THE
4 CASE.

5 THE PAST PROCESS FOR APPROVING DRUGS FOR
6 RARE DISEASES BY THE FDA WAS VERY SLOW. BUT THIS
7 HAS SIGNIFICANTLY IMPROVED IN THE LAST FEW YEARS
8 WITH THE ADVENT OF ACCELERATED APPROVAL PATHWAY.
9 AND I'LL TOUCH ON THAT A LITTLE BIT MORE WHEN I
10 DISCUSS THE PROJECTS.

11 EXAMPLES OF CURRENT ACTIVE RARE DISEASE
12 PORTFOLIO IS REPRESENTED LARGELY BY BLOOD DISEASES,
13 NEUROLOGIC CONDITIONS, AND BLOOD CANCERS, AS I
14 MENTIONED EARLIER. SOME WERE FUNDED IN THE
15 DISCOVERY STAGE AND MANY DURING TRANSLATION, AND
16 SOME PROGRESSED TO THE CLINICAL STAGE. WE ALSO GET
17 RARE DISEASE APPLICATIONS FOR THE CLINICAL STAGE
18 ONLY. SO THE PROGRESSION EVENTS HAVE BEEN HELPFUL
19 FOR US TO KEEP TRACK OF THE PROJECT'S PROGRESS.

20 OUR PORTFOLIO OF RARE DISEASES COVERS
21 CONDITIONS THAT AFFECT ALL AGES, INCLUDING BABIES,
22 TODDLERS, ADOLESCENTS, AND ADULTS. AND LUCKILY, WE
23 LIVE IN AN ERA WHERE STATE-OF-THE-ART TECHNOLOGIES
24 ARE BEING INVESTED INTO MANY OF THESE PROGRAMS, AND
25 THAT'S AN ADVANTAGE FOR THE WORLD, GRANTEES, AND THE

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1 PATIENTS. SOME ARE ADVANCING TOWARDS REGISTRATION
2 AND POTENTIAL APPROVAL. AGAIN, THE REMAINDER OF MY
3 PRESENTATION WILL COVER A STATUS REPORT OF SPECIFIC
4 RARE DISEASE PROJECTS, SOME OF WHICH YOU MAY BE
5 FAMILIAR WITH, AND DESCRIBE BRIEFLY WHAT THEY'VE
6 ACHIEVED.

7 I'M GOING TO START BY SHARING THE GRANTS
8 WHERE TREATMENT OF THE BABIES TAKES PLACE WHEN THE
9 BABY IS IN THE WOMB. CELL THERAPY FOR SPINA BIFIDA
10 HAS BEEN PIONEERED DR. DIANA FARMER OF UC DAVIS.
11 SPINA BIFIDA IS A CONDITION THAT HAPPENS WHEN THE
12 NEURAL TUBE DOES NOT CLOSE ALL THE WAY IN THE WOMB,
13 OFTEN RESULTING IN DAMAGE TO THE SPINAL CORD AND
14 NERVES AND RESULTING IN THE BABY'S PARALYSIS,
15 ESPECIALLY THE LEGS.

16 THE TEAM IS USING BANKED PLACENTAL
17 MESENCHYMAL CELLS ON AN FDA-APPROVED AMNIOTIC
18 MEMBRANE PATCH AS A TREATMENT. THIS HAS BEEN REALLY
19 INNOVATIVE AND VERY ENCOURAGING. THE RESULTS SO FAR
20 ALSO SUGGEST THAT. THIS POSITIVE TRIAL IS IN
21 PROGRESS AND IS ENROLLING WELL A TOTAL OF SIX
22 PATIENTS.

23 I THOUGHT WE ALSO WOULD ENJOY SEEING BABY
24 TOBY AT HIS THREE-MONTH EXAM WITH MOM MICHELLE AND
25 DAD JEFF. OBVIOUSLY THE THREE OF THEM LOOK HAPPY.

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1 THE SECOND IN-UTERO PROGRAM INCLUDES
2 EVALUATION OF CELL THERAPY FOR ALPHA THALASSEMIA
3 MAJOR, WHICH IS A GENETIC DISORDER OF HEMOGLOBIN
4 SINCE THAT IS FATAL WITHOUT INTERVENTION. MOST
5 PREVALENT INDIVIDUALS FROM SOUTHEAST ASIA, CHINA,
6 AND THE MIDDLE EAST. THE APPROACH IS TO REPLACE THE
7 BABY'S CELLS WITH THE UNDESIREG GENE WITH THE MAMA'S
8 HEALTHY CELLS. THE PROJECT DOES INCLUDE
9 TRANSPLANTING THE MOTHER'S BLOOD STEM CELLS INTO THE
10 FETUS.

11 THE INTERIM RESULTS INDICATE THE APPROACH
12 IS SAFE. AS YOU KNOW, MANY ARE ALWAYS CONCERNED
13 ABOUT IN-UTERO IMMUNOTHERAPIES OR TREATMENTS. FOR
14 THIS APPROACH DR. TIPPI MACKENZIE HAS DONE A GREAT
15 JOB IN MANAGING THE SAFETY OF THAT EFFORT. AND IT'S
16 FEASIBLE WITH PRELIMINARY EARLY EVIDENCE OF
17 TOLERANCE. BY THE WAY, DR. TIPPI MACKENZIE IS FROM
18 UCSF.

19 ADVANCES IN TREATMENT IN THE SEVERE
20 COMBINED IMMUNODEFICIENCY SYNDROME, ALSO CALLED THE
21 BUBBLE BABY, HAVE PROGRESSED VERY WELL. AND REALLY
22 THIS IS AN AREA THAT HAS FLOURISHED VERY NICELY WITH
23 THE ADVENT OF ALL THE MOLECULAR NEW TOOLS.

24 FOUR DIFFERENT SKIN DISEASES ARE SHOWN ON
25 THIS SLIDE. THE THERAPIES ARE USING GENE CORRECTION

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1 AND AUTOLOGOUS THERAPY. ALL RECEIVED ACCELERATED
2 DESIGNATIONS BY THE FDA. AGAIN, THAT WAS REALLY TO
3 THE ADVANTAGE OF THOSE FOUR PROGRAMS AND THE
4 CHILDREN.

5 SO THE ONE YOU HEAR MOST ABOUT IS THE
6 ADA-SCID, WHICH IS ADENOSINE DEAMINASE SCID. THE
7 INVESTIGATOR AND THE HERO OF THAT PROGRAM IS DR. DON
8 KOHN OF UCLA. HE WAS ABLE TO GET DURABLE
9 RESTORATION OF THE IMMUNE SYSTEM FOR OVER TWO YEARS,
10 AND HE TREATED 50 PATIENTS. EVIE, THE ONE YOU SEE
11 FLYING IN THAT PICTURE, IS ONE OF THE FIRST INFANTS
12 TO GET THE TREATMENT. SHE IS NOW 11 YEARS OLD AND
13 LIVING A NORMAL LIFE.

14 THE NEXT IS X-SCID, WHICH IS A GRANT THAT
15 WAS AWARDED TO DR. GOTTSCHALK FROM ST. JUDE IN
16 COLLABORATION WITH DR. COWAN FROM UCSF. THE INTERIM
17 RESULTS FROM THE CLINICAL DATA SHOW THAT THOSE
18 CHILDREN ARE NOW HAVING NORMAL T-CELLS AND NK-CELLS.
19 AND THOSE CELLS ARE IMPORTANT FOR FIGHTING OFF
20 INFECTIONS. EIGHT PATIENTS HAVE BEEN FOLLOWED, 16
21 MONTHS MEDIAN FOLLOW-UP. RONNIE AND JA'CEON IS THE
22 NAME OF THE YOUNG BABY THERE, BABY BOY, LOOKS VERY
23 HAPPY AND HEALTHY. THEY ARE ACTUALLY LEADING A
24 NORMAL LIFE.

25 THE THIRD PROGRAM IS THE ART-SCID. THE

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1 INVESTIGATORS ARE DR. MORT COWAN AGAIN AND JENNIFER
2 PUCK OF UCSF WITH PROMISING RESULTS WITH 13
3 PATIENTS. THE ART-SCID IS PREVALENT IN THE NAVAJO
4 CHILDREN. AND DRS. PUCK AND MORT ACTUALLY VISIT THE
5 NAVAJO CHILDREN ONCE A YEAR GIVING PHYSICALS TO THE
6 ONES TREATED AND POTENTIALLY TO RECRUIT NEW ONES.
7 SO YOU SEE HERE THE PATIENT HATAALI, AND SHE, AGAIN,
8 LOOKS HAPPY AND GROWING AS A NORMAL CHILD.

9 THE LAST PROGRAM IS LEUCOCYTE ADHESION
10 DEFICIENCY WHICH IS BEING DEVELOPED BY ROCKET PHARMA
11 IN COLLABORATION, AGAIN, WITH DR. DON KOHN OF UCLA.
12 THAT PROGRAM COMPLETED ENROLLMENT OF NINE PATIENTS
13 AND IS ACTUALLY PREPARING FOR A BIOLOGICS LICENSE
14 APPLICATION FILING. AND THAT'S THE STEP THAT THE
15 FDA AND THE GRANTEE WORK TOGETHER SO AS TO ALLOW THE
16 PROGRAM TO GO TO POTENTIAL REGISTRATION AND TO THE
17 MARKET.

18 MARLEY IS ONE OF THOSE PATIENTS WHO
19 RECEIVED THIS TREATMENT AND IS ALSO DOING WELL. YOU
20 SEE, AGAIN, SHE'S HAPPY AND WAVING IN THIS PICTURE.

21 NOW WE MOVE TO CAR-T IMMUNOTHERAPY FOR
22 TREATMENT OF GLIOMAS. THE WORK IS BEING DONE BY DR.
23 CRYSTAL MACKALL AND HER STANFORD COLLEAGUES. THE
24 PROGRAM DEALS WITH TWO TYPES OF GLIOMAS. THESE ARE
25 TUMORS OF THE BRAIN OR CANCER OF THE BRAIN THAT

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1 AFFECT CHILDREN AND YOUNG ADULTS AND CAN BE ALMOST
2 UNIVERSALLY FATAL. THE STUDY IS INVESTIGATING THE
3 SAFETY, FEASIBILITY, ROUTE OF DELIVERY OF THIS CAR-T
4 TREATMENT. AND ESPECIALLY IN THIS CASE THE NEURAL
5 CELLS, THE CAR-T.

6 THREE OF THE FOUR PATIENTS SHOWED CLINICAL
7 AND RADIOGRAPHIC IMPROVEMENTS. TOXICITIES ARE
8 MANAGEABLE AND REVERSIBLE WITH SUPPORTIVE CARE. THE
9 RESPONDING YOUNG ONES FOR DR. CRYSTAL MACKALL
10 ACTUALLY ARE ABLE TO PARTICIPATE IN DAILY LIFE.
11 SOME ARE JOINING THEIR FAMILIES ON OUTINGS LIKE
12 GOING TO THE PARK OR TO A FAMILY GATHERING.

13 THE NEXT INDICATION IS GENE THERAPY FOR
14 CYSTINOSIS WHERE THE AMINOACID CYSTINE ACCUMULATES
15 IN THE TISSUES AND FORMS CRYSTALS THAT CAUSE HARM TO
16 THE TISSUE, AND THE PATIENTS ARE IN PAIN. DR.
17 STEPHANIE CHERQUI OF UC SAN DIEGO IS THE PI. THE
18 GRANT IS FOR CONDUCTING A PHASE 1-2 CLINICAL TRIAL
19 WHERE THE GENE CYSTINOSIN IS PROVIDED SO THE CYSTINE
20 DOES NOT ACCUMULATE. THE PROJECT PROGRESSED FROM
21 DISCOVERY TO CLIN1 AND THEN TO CLIN2.

22 INTERIM RESULTS ON THE FIRST THREE
23 PATIENTS ARE SHOWN ON THE SLIDE. THERE'S SUSTAINED
24 ENGRAFTMENT FOR OVER ONE YEAR AND MORE. ORAL
25 MEDICATION IS NO LONGER REQUIRED. AND REDUCED

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1 CYSTINE CRYSTALS IN THE SKIN AND IN THE INTESTINES.
2 NO ADVERSE EVENTS WERE RELATED TO THIS DRUG PRODUCT.
3 THE CHILD IS ACTIVE AND GROWING.

4 I WANTED TO MENTION TO YOU THE PATIENT,
5 JORDAN, AS YOU SEE HIM HERE, SMILING WITH DR.
6 CHERQUI. WHAT IS CURIOUS ABOUT JORDAN IS THAT IT
7 APPEARED AN UNEXPECTED SIDE EFFECT WITH THE TRIAL.
8 THEY OBSERVED THAT HIS BLONDE HAIR CHANGED TO BECOME
9 A BRUNETTE. HE NOW HAS DARK HAIR. AND WE'RE KIND
10 OF CURIOUS WHAT'S THE MECHANISM OF THAT SIDE EFFECT.
11 AND DR. CHERQUI IS MOVING FORWARD TO UNDERSTAND THAT
12 AS WELL.

13 AS YOU KNOW, WE'VE BEEN FUNDING SICKLE
14 CELL PROJECTS. FOUR OF THEM ARE PRESENTED ON THIS
15 SLIDE. EACH OF THE CLINICAL TRIALS USES A DIFFERENT
16 APPROACH, AND I JUST WANTED TO REMIND ALL OF US THAT
17 CIRM WELCOMES MULTIPLE SHOTS ON GOAL BECAUSE THE
18 PATIENTS DESERVE TO GET WHATEVER WORKS FOR THEM.

19 THE INVESTIGATORS ARE DR. PORTEUS OF
20 STANFORD. HE WAS FUNDED BY CIRM AT THE PRECLINICAL
21 STAGE. THE CLINICAL TRIAL IS FUNDED BY GRAPHITE
22 BIO. HE'S DOING GENE CORRECTION WITH VIRAL VECTOR
23 AND USING CRISPR. THERE ARE THREE CLINICAL TRIALS
24 CURRENTLY IN OUR PORTFOLIO IN THE AREA OF SICKLE
25 CELL.

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1 DR. DON KOHN OF UCLA, AGAIN, PIONEERED
2 THAT WORK, AND HE'S USING GENETIC MODIFICATION WITH
3 A DIFFERENT VIRAL VECTOR. AND HERE YOU SEE EVIE
4 JAMES JR. AGAIN DOING WELL. HE'S AGE 29. THE PHOTO
5 WAS TAKEN TWO YEARS POST-TRANSPLANT, AND HE IS
6 HAPPY.

7 FOR THE CIRM AND NHLBI PARTNERSHIP, WE
8 HAVE THREE CLINICAL GRANTS THAT HAVE BEEN FUNDED BY
9 THIS PARTNERSHIP. DR. MARK WALTERS OF UCSF BENIOFF
10 CHILDREN'S HOSPITAL, HE RECEIVED A CLIN1 GRANT TO
11 CONDUCT IND-ENABLING STUDIES SO HE CAN GO ON TO
12 START A CLINICAL TRIAL. AND THEN THE CLIN2 GRANT
13 FOR HIS PHASE 1 TRIAL. HE'S FOLLOWING A NONVIRAL
14 DELIVERY USING CRISPR.

15 DR. DAVID WILLIAMS FROM BOSTON CHILDREN'S
16 HOSPITAL CONDUCTING A PHASE 2 TRIAL, AGAIN WITH DR.
17 WALTERS BEING HIS PARTNER ON THIS WORK. THE PROJECT
18 APPROACH IS CENTERED ON MAINTAINING FETAL HEMOGLOBIN
19 IN THE ADULT. INTERESTINGLY ENOUGH, FETAL
20 HEMOGLOBIN PREVENTS SICKLING. SO HE'S USING RNA TO
21 SUPPRESS OR SILENCE THE GENE THAT REPRESSES FETAL
22 HEMOGLOBIN EXPRESSION. BOTH DR. WILLIAMS' AND DR.
23 WALTERS' GRANTS ARE RELATIVELY EARLY IN THE CONDUCT
24 OF THEIR TRIALS.

25 NOW WE MOVE TO ALSO ADULTS WHO SUFFER FROM

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1 EYE DISEASES. SO CELL THERAPY FOR RETINITIS
2 PIGMENTOSA WAS PIONEERED BY DR. HENRY KLASSEN OF UC
3 IRVINE FOR ADULTS AFFLICTED WITH THIS DISEASE. DR.
4 KLASSEN IS A CLASSIC MODEL FOR US. HE RECEIVED
5 SEVERAL GRANTS FROM DISCOVERY, DISEASE TEAM AWARDS,
6 TWO CLINICAL GRANTS WITH THE LAST ONE FOR REPEAT
7 ADMINISTRATION AFTER ONE YEAR FOLLOW-UP. THE PHASE
8 1-2 CLINICAL TRIAL OF 35 PATIENTS WITH REPEAT
9 ADMINISTRATION IS COMPLETED, AND THERE HAVE BEEN NO
10 SAFETY ISSUES WITH THAT TRIAL. SO IF THE PATIENT
11 NEEDS MORE THAN ONE TREATMENT, IT APPEARS, BASED ON
12 THE 35 PATIENTS, THAT IT'S NOT GOING TO BE A
13 PROBLEM.

14 YOU SEE A PHOTO HERE OF ROSIE BARRERO IS
15 ONE OF THE FIRST PATIENTS WHO RECEIVED ONLY ONE
16 INJECTION OF THIS THERAPY. ROSIE NOW CAN SEE HER
17 KIDS. RETINITIS PIGMENTOSA PROGRESSES SLOWLY IN THE
18 YOUNG ADULT, AND BY LIKE MID-20S YOU NO LONGER CAN
19 HAVE GOOD EYESIGHT. AT AGE 26 I THINK SHE WAS GIVEN
20 THE TREATMENT, AND SHE WAS ABLE TO SEE HER KIDS
21 AFTER THAT FOR THE FIRST TIME AND ABLE TO DRIVE A
22 CAR.

23 JCYTE RECEIVED ACCELERATED DESIGNATION,
24 RMAT, FROM THE FDA. REMEMBER WHAT I SAID,
25 ACCELERATED DESIGNATIONS HELP THE GRANTEE AND THE

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1 PROJECT TO CONTINUE CONSULTATION WITH THE FDA ON A
2 REGULAR BASIS REGARDING THE PROGRESSION.

3 THE PHASE 2 STUDY IDENTIFIED A BIOMARKER
4 FOR POTENTIAL RESPONDERS THAT IS GOING TO BE HELPFUL
5 FOR THE DESIGN OF THE NEXT TRIAL, WHICH IS LIKELY TO
6 BE THE REGISTRATIONAL TRIAL FOR THIS PROJECT. AND
7 THE DESIGN OF THAT NEXT TRIAL IS ACTUALLY IN
8 PROGRESS.

9 GENE THERAPY FOR PARKINSON'S DISEASE IS
10 CLOSE TO MY HEART AND SOME OF THE BOARD MEMBER'S
11 HEART. THE PHASE 1B TRIAL THAT'S USING GUIDED MRI
12 FOR DELIVERING A NEUROTROPHIC FACTOR GENE FOR
13 STIMULATING THE REGENERATION OF DOPAMINE-PRODUCING
14 NEURONS IN THE APPROPRIATE SITE IN THE BRAIN CALLED
15 THE PUTAMEN. THE TRIAL IS DESIGNED -- THE STUDY
16 INVOLVED TWO COHORTS, MILD AND MODERATE DISEASE.
17 PRELIMINARY RESULTS WITH 11 OF THE 12 PATIENTS SHOW
18 THAT THE TREATMENT IS WELL TOLERATED. AND THE TWO
19 COHORTS THAT WERE TREATED, ONE OF THEM WITH A MILD
20 COHORT, THEY HAVE STABILITY OF THE MOTOR CORES. AND
21 THEN FOR THE MODERATE COHORT, THE BENEFIT IS VERY
22 OBVIOUS IN DAILY LIVING AND IN THE MOTOR OUTCOMES.

23 SO ADVANCING THIS PORTFOLIO IS A DYNAMIC
24 PROCESS THAT ENGAGES ALL OF US, CIRM, THE GRANTEES,
25 PATIENT REPRESENTATIVES, AS WELL AS CIRM EXPERTS

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1 THAT WE RECRUIT THAT SPECIALIZE IN THE DIFFERENT
2 AREAS THAT WE ARE STUDYING. WE DO THAT THROUGH
3 CLINICAL ADVISORY PANELS WHICH WE CALL CAPS. WE'VE
4 CONDUCTED 356 CAPS SINCE 2016. WE UTILIZED, ENGAGED
5 91 EXTERNAL ADVISORS AND 68 PATIENT REPRESENTATIVES.
6 THE PATIENT REPRESENTATIVES ARE HARD TO FIND, AND
7 SOME OF THEM ACTUALLY THEN OVERLAP FOR A COUPLE OF
8 PROJECTS. AND WE ARE VERY GRATEFUL FOR THAT.

9 THE QUESTION YOU MIGHT ASK US: DO CAPS
10 REALLY MAKE A DIFFERENCE? AND LET ME TELL YOU THE
11 SIMPLE ANSWER IS YES. HOW DO WE MEASURE THAT? WE
12 MEASURE THAT BY DOCUMENTING THE CHALLENGES AND THEN
13 LOOKING AT THE OUTCOMES OVER TIME. SO SOME OF THE
14 OUTCOMES THAT WE LOOK AT INDICATED THAT, FOR
15 EXAMPLE, MANUFACTURING CHALLENGES HAVE BEEN
16 OVERCOME, CLINICAL TRIAL DESIGN WAS OPTIMIZED,
17 ENROLLMENT ENHANCED, AND REGULATORY ADVICE THAT WAS
18 PROVIDED WAS CONSISTENT WITH WHAT THEY HEAR WITH THE
19 FDA AND EVEN SOMETIMES ADVANCING THEM FURTHER, AND
20 THEN PARTNERING IS FACILITATED, AND THE DEVELOPMENT
21 PATH OVERALL, ESPECIALLY FOR THOSE WHO HAD CAPS,
22 BECAUSE WE DO CAPS FOR CLIN1 AND CLIN2, AND NOW WE
23 DO TAPS, WHICH IS TRANSLATION ADVISORY PANELS, FOR
24 PROGRAMS THAT ARE IN THE TRANSLATION STAGE. SO FAR
25 THE CAP ADVICE IMPACTED 75 PERCENT OF OUR CLINICAL

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1 AWARDS.

2 I'M GOING TO STOP NOW AND LEAVE YOU WITH A
3 PHOTO OF HEALTHY EVIE ENJOYING SURFING. SHE'S
4 REALLY A POSTER CHILD FOR THE ADA-SCID AND HAS DONE
5 VERY WELL. THANK YOU FOR YOUR ATTENTION, AND I'M
6 HAPPY TO ANSWER ANY QUESTIONS THAT YOU MAY HAVE.

7 MS. BONNEVILLE: ANNE-MARIE HAS HER HAND
8 RAISED, J.T.

9 CHAIRMAN THOMAS: ANNE-MARIE.

10 DR. DULIEGE: ABLA, CONGRATULATIONS. IT'S
11 A REMARKABLE PRESENTATION, AND IT'S GREAT FOR US TO
12 TRULY HEAR MORE SPECIFIC UPDATES THAN WHAT WE GET
13 GENERALLY. THANK YOU FOR TAKING THE TIME TO PUT
14 TOGETHER THIS PRESENTATION, BUT, MORE IMPORTANTLY,
15 THANK YOU TO YOU AND THE ENTIRE CIRM AND BEYOND FOR
16 ALL THE WORK THAT THIS REPRESENTS.

17 SO I JUST WANTED TO CLARIFY ONE THING.
18 WHAT YOU PRESENTED IS THE RESULT OF THE COLLECTIVE
19 EFFORT OF PROP 71 AND PROP 14; IS THAT RIGHT? IT'S
20 OBVIOUSLY THE ENTIRE ERA OF CIRM CLEARLY.

21 MY QUESTION, HOW THE ALPHA CLINICS HAVE
22 HELPED OR WHAT HAVE BEEN THE ROLE OF ALPHA CLINICS?
23 THAT'S QUESTION NO. 1.

24 AND NO. 2, WE SEE, PARTICULARLY WITH THE
25 RETINITIS PIGMENTOSA PROJECT, THAT WE'RE REALLY

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1 QUITE CLOSE TO FINALLY A REGISTRATIONAL OR PHASE 3
2 TRIAL, WHICH IS ABSOLUTELY REMARKABLE. ARE THERE
3 OTHER PROJECTS THAT ARE GETTING CLOSE TO THIS
4 CRITICAL STAGE? THANK YOU.

5 DR. CREASEY: THANK YOU, ANNE-MARIE. SO
6 THE QUESTION REGARDING THE ALPHA CLINICS, ALPHA
7 CLINICS ARE OUR PARTNERS. MANY OF THE PROGRAMS THAT
8 I'VE MENTIONED ARE RUN AT THE ALPHA CLINICS AS WELL.
9 SO THE WAY IT WORKS, THE ALPHA CLINICS MANAGER,
10 GEOFF LOMAX, WORKS WITH US IN HAVING THE PROGRAMS
11 PRESENTED TO THE ALPHA CLINICS DIRECTORS. AND THEY
12 AGREE ON HOW ARE THEY GOING TO COLLABORATE IN
13 ADVANCING THESE PROGRAMS TOGETHER WITH CIRM.

14 AND SO IT'S UP TO, AGAIN, THE PI'S WHO
15 ACTUALLY ARE AWARDED THE GRANTS TO WORK CLOSELY WITH
16 THE ALPHA CLINICS, BUT THE RELATIONSHIP IS VERY
17 SYNERGISTIC AND HAS PRODUCED GREAT OUTCOME FOR BOTH
18 SIDES.

19 AND AS FAR AS THE PROPOSITION 71 AND 14,
20 YOU ARE CORRECT. THIS IS ALL AN OUTCOME OF ALL
21 THAT.

22 FOR THE RETINITIS PIGMENTOSA PROGRAM, IT
23 IS THE CLOSEST TO POTENTIAL REGISTRATION FOR ADULTS
24 LIKE THAT. ACTUALLY WE HAVE A COUPLE OF OTHERS, BUT
25 THEY'RE AT A STAGE NOT READY YET TO SHARE BECAUSE OF

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1 THE FACT THAT THEY'RE STILL IN DISCUSSIONS EITHER
2 WITH THE FDA, ET CETERA. AND SO WE OPTED TO GO WITH
3 WHAT WAS PUBLICLY SHARED WITH US THAT INFORMATION.

4 DR. DULIEGE: THANK YOU VERY MUCH.
5 CONGRATS AGAIN.

6 DR. CREASEY: THANK YOU.

7 CHAIRMAN THOMAS: FRED.

8 DR. FISHER: I WANT TO ECHO EVERYTHING
9 ANNE-MARIE SAID AND ADD THAT BEING PART OF AN
10 ORGANIZATION THAT'S DOING SUCH GREAT WORK IS REALLY
11 FULFILLING. I'M GRATEFUL FOR THE OPPORTUNITY.

12 A QUESTION AT THIS WEEK'S REVIEW
13 SUBCOMMITTEE WAS RELATED TO THE BENCHMARK THAT'S IN
14 THE PROP 71 LEGISLATION REGARDING INVESTMENT IN
15 NEURODEGENERATIVE DISEASES. I NOTED ON THE SLIDE
16 THAT YOU REFERENCED 22 PERCENT, I THINK, OF THE
17 PROJECTS WERE NEURO PROJECTS, BUT WE DIDN'T SEE THE
18 MEASUREMENT IN TERMS OF THE PERCENTAGE OF FUNDING SO
19 THAT AS A BOARD WE CAN BE TRACKING OUR COMMITMENT TO
20 INVEST A MINIMUM OF, I THINK IT WAS, 20 OR 25
21 PERCENT. I THINK PERIODICALLY -- AND I APOLOGIZE IF
22 I MISSED THAT. BUT I THINK PERIODICALLY I AGREE
23 WITH THE QUESTIONER YESTERDAY -- I DON'T WANT TO
24 ATTRIBUTE TO ANYONE BECAUSE I MIGHT NOT BE CLEAR.
25 MAYBE YOU ARE GOING TO SHOW IT TO ME RIGHT NOW -- IN

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1 TERMS OF THE DOLLARS AND HOW WE ARE MEASURING UP TO
2 THE COMMITMENT FOR THAT SPENDING BENCHMARK IF THAT'S
3 CLEAR.

4 DR. CREASEY: AGAIN, THANK YOU FOR THE
5 QUESTION, MR. FISHER. SO I MAY HAVE NOT SAID THIS,
6 BUT OUT OF THE 14 GRANTS, CLINICAL GRANTS, THAT HAVE
7 BEEN AWARDED SINCE PROPOSITION 14 PASSED, 35 PERCENT
8 OF THEM, FIVE OF THE 14, ARE IN NEURO. AND SO WE
9 ARE ADVANCING THE NEURO AT A FASTER PACE OR MANY
10 MORE GRANTS ARE COMING IN IN THE NEURO AREA FOR US,
11 ESPECIALLY SINCE THE PROPOSITION PASSED.

12 AS FAR AS THE AMOUNT OF DOLLARS THAT WE
13 SPENT ON THAT, I ACTUALLY DON'T HAVE THE NUMBER
14 RIGHT NOW, BUT HAPPY TO BRING IT OR GET IT FOR YOU.

15 DR. FISHER: THANKS. I THINK THAT SINCE
16 IT'S SPECIFICALLY SPELLED OUT IN THE PROP 14
17 LANGUAGE, THE DOLLARS THAT WOULD BE SPENT ON NEURO,
18 I THINK PERIODICALLY THE BOARD GETTING AN UPDATE ON
19 WHERE WE ARE IN TERMS OF MEETING THAT BENCHMARK OR
20 EXCEEDING IT WOULD BE IMPORTANT TO KNOW. AND CREDIT
21 TO, I DON'T KNOW IF IT WAS DAVID OR WHO IT WAS THE
22 OTHER DAY THAT RAISED THIS ISSUE, BUT THANK YOU.

23 DR. CREASEY: AGAIN, AS DR. MILLAN
24 MENTIONED TO YOU AGAIN IS THAT OUR HIGHEST FOCUS IS
25 REALLY NEURO. WITH THE FACT THAT NOW WE HAVE THE

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1 FUNDS AGAIN WITH YOUR APPROVAL, WE WILL CONTINUE
2 TO -- BRINGING IN NEW GRANTS TO CIRM IS ACTUALLY A
3 COLLABORATIVE EFFORT WITH US TALKING TO
4 INVESTIGATORS OUTSIDE CIRM AND UNIVERSITIES AND
5 COMPANIES TO ENCOURAGE THEM TO APPLY. AND THAT
6 RELATIONSHIP IS BEING FOSTERED WITH ALL THE FOLKS IN
7 THE STATE OF CALIFORNIA AS WELL AS OUTSIDE THE STATE
8 OF CALIFORNIA. SO WE ARE RELATIVELY CONFIDENT THAT
9 WE WILL BE BRINGING IN MORE CLINICAL GRANTS IN THE
10 AREA OF NEURO.

11 BY THE WAY, WHEN WE THINK OF NEURO, WE
12 DON'T THINK OF CLINICAL. WE THINK OF DISCOVERY,
13 TRANSLATION, AND CLINICAL. WHEN YOU PUT ALL THOSE
14 NUMBERS TOGETHER, I THINK MY RECOLLECTION IS THAT I
15 THINK WE MAY HAVE SPENT \$720,000 -- \$720 MILLION ON.
16 I DON'T COUNT IN MILLIONS AS A NORMAL PERSON. SO
17 \$720 MILLION HAS BEEN SPENT ON NEURO THUS FAR.

18 ANYTHING ELSE REGARDING THAT, MR. FISHER?

19 DR. MILLAN: ABLA, IF I MAY. CHAIRMAN
20 THOMAS, MAY I?

21 CHAIRMAN THOMAS: YES, PLEASE.

22 DR. MILLAN: SO I THINK THAT'S AN
23 EXTREMELY IMPORTANT QUESTION. AND WE HAVE BEEN
24 TAKING THAT PARTICULAR TOPIC TO A VARIETY OF
25 INTERNAL STRATEGY MEETINGS. ONE OF THEM IS TO

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1 DETERMINE HOW THEY'RE GOING TO BE -- HOW WE ARE
2 GOING TO NOT JUST PROMOTE THE NUMBERS OF NEURO
3 PROGRAMS COMING IN, BUT HOW THESE CAN BE ORGANIZED
4 TO EMPOWER AND ESSENTIALLY CREATE KIND OF A
5 MULTIPLIER EFFECT OF THE PROGRAMS WE FUNDED TOWARD
6 FUTURE EFFORTS. SO YOU WILL BE HEARING MORE ABOUT
7 THAT AT UPCOMING MEETINGS AS THIS, WE CALL IT, NEURO
8 SUBSTRATEGIES ARE BEING DEVELOPED INTERNALLY BY THE
9 TEAM.

10 SECONDLY, JUST MORE CONCRETELY, WE WILL BE
11 REPORTING ON THE DOLLAR AMOUNTS IN OUR ANNUAL
12 REPORT. WE DO TRACK IT. WE TRACK IT ACCORDING TO
13 OUR BUDGETARY PLANNING AND EXPENDITURES. AND THAT
14 ALSO GUIDES HOW WE ORGANIZE OUR PROGRAMS AND HOW WE
15 WORK WITH OUR REVIEW TEAM AND OTHERS IN TERMS OF
16 WHAT CAN WE DO WITH OUR STANDARD PROGRAM
17 OPPORTUNITIES TO MAKE SURE THAT WE ARE ATTRACTING
18 PROGRAMS IN NEURO, NOT ONLY CNS, BUT ALSO PSYCHIATRY
19 AND MENTAL HEALTH. WE'RE TRYING TO INCORPORATE THAT
20 KIND OF HOLISTICALLY ACROSS OUR PROGRAMS TO MAKE
21 SURE THAT WE BRING IN THOSE TYPES OF PROGRAMS.

22 BUT IN THE UPCOMING YEAR OR TWO, WE SHOULD
23 HAVE ENOUGH INFORMATION TO DO A MORE FULSOME REPORT
24 BACK TO THE BOARD IN TERMS OF WHERE WE ARE, WHAT WE
25 ARE PLANNING TO DO. AND JUST TO LET YOU KNOW, IT'S

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1 DEFINITELY IN THE MIDDLE OF OUR DASHBOARD. IT'S
2 VERY PROMINENT IN HOW WE ARE PLANNING OUR SCIENTIFIC
3 PROGRAMS.

4 CHAIRMAN THOMAS: THANK YOU. JUDY AND
5 THEN DAVID.

6 DR. GASSON: DAVID WAS FIRST. I'M SORRY.

7 CHAIRMAN THOMAS: DAVID THEN JUDY.

8 DR. HIGGINS: IT DOESN'T MATTER. EITHER
9 WAY. I THINK THIS DISCUSSION PROVES THAT, IF YOU
10 WAIT LONG ENOUGH, YOUR QUESTION WILL BE ANSWERED BY
11 ALL THE QUESTIONS THAT COME BEFORE YOU. EVERYBODY
12 HAS DONE A PHENOMENAL JOB OF GIVING ABLA, I THINK,
13 THE RIGHT QUESTIONS, AND SHE'S GIVING US THE RIGHT
14 ANSWERS. SO I'M NOT GOING TALK TOO MUCH.

15 THE QUESTION I HAVE, I'LL ASK ONE QUESTION
16 AND MAKE ONE COMMENT. THE QUESTION I HAD IS
17 HISTORICALLY NEURO PROGRAMS, WHETHER THEY BE
18 CLINICAL OR DISCOVERY OR WHATEVER, HAVE ALWAYS BEEN
19 UNDERREPRESENTED AS TO WHAT WE WOULD LIKE TO HAVE
20 AND WHAT SORT OF REPRESENTS THE DISEASES OUT IN THE
21 COMMUNITY. THAT'S TRUE ACROSS THE BOARD. IT'S NOT
22 A CIRM THING. BUT WHAT I'M WONDERING IS, AND YOU
23 CAN PASS ON THIS QUESTION, ABLA, IF YOU LIKE, WHAT
24 ARE WE DOING DIFFERENTLY THAN WE WOULD HAVE DONE
25 FIVE YEARS AGO TO TRY TO ENRICH OUR PORTFOLIO IN

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1 NEURO PROGRAMS ACROSS THE BOARD? I IMAGINE YOU HAVE
2 AN ANSWER TO THAT, SO I'M NOT TOO WORRIED ABOUT IT.

3 BUT BEFORE YOU ANSWER THAT, I'M JUST GOING
4 TO DO A PUBLIC SERVICE FOR EVERYBODY BECAUSE WHAT WE
5 DO AT CIRM IS SO IMPORTANT, BUT LET ME PUT IT INTO
6 CONTEXT.

7 CHULA VISTA IS THE LAST COMMUNITY ON THE
8 CALIFORNIA COAST BEFORE YOU GO INTO MEXICO. IT'S A
9 LARGE CITY. IT'S 175, 200,000 PEOPLE. THEY ARE
10 BUILDING A PHENOMENAL COMPLEX OF A NEW 1400-ROOM
11 HOTEL, 5,000 NEW EMPLOYEES, PARKS, MARINAS. IT'S
12 GOING TO BE THE LAST AND SORT OF THE CROWN IN THE
13 DEVELOPMENT OF THE COASTLINE. AND IT WAS A VERY BIG
14 DEAL BECAUSE THIS THE LAST THING WE'RE EVER GOING TO
15 DO IN HUMANITY AND WE'RE GOING TO SPEND IT. THEIR
16 BUDGET FROM SOUP TO NUTS IS \$1.3 BILLION. SO JUST
17 PUT THAT IN PERSPECTIVE. THAT'S LESS THAN WE WILL
18 SPEND ON NEURO PROGRAMS THROUGH THE LIFE OF CIRM.

19 SO I JUST WANTED TO EMPHASIZE HOW
20 IMPORTANT WHAT WE DO IS, AND HOW, COMPARED TO WHAT
21 OTHER THINGS COST AND OTHER THINGS DELIVER, WE ARE A
22 GOOD VALUE FOR YOUR MONEY FOR TAXPAYERS. ENOUGH
23 SAID.

24 DR. CREASEY: DAVID, I UNDERSTAND WHAT YOU
25 ARE ADVOCATING FOR, AND I UNDERSTAND THE IMPORTANCE

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1 OF NEURO. I THINK DR. MILLAN MENTIONED A COUPLE OF
2 STRATEGIES THAT WE'RE TAKING. WE ARE DEVELOPING
3 CONSORTIA OR WOULD LIKE TO DEVELOP CONSORTIA THAT
4 DEAL WITH NEUROLOGICAL DISEASES THAT ARE, NOT JUST
5 BY OURSELVES, WITH A LOT OF OTHER POTENTIAL
6 OPPORTUNITIES. AND THE OTHER WOULD BE ALSO THE
7 DESIGN OF THE TRIALS. WHERE I SIT, WE'VE BEEN
8 DISCUSSING THE POTENTIAL OF DOING BASKET TRIALS IN
9 NEURO, UMBRELLA TRIALS IN NEURO WHICH AWARD US THE
10 BENEFIT OF TESTING MODALITIES IN A MORE RAPID MANNER
11 FOR VARIOUS NEUROLOGICAL DISEASES.

12 AND SO WE ARE -- ACTUALLY WE HEARD YOU, WE
13 ARE THINKING, AND WOULD LIKE TO IMPLEMENT AS SOON AS
14 POSSIBLE, BUT WE THINK COLLECTIVELY, THROUGH DR.
15 MILLAN'S LEADERSHIP, IS THAT CIRM CANNOT BE AN
16 ISLAND. IT HAS TO CONNECT WITH ALL THE FOLKS WHO
17 ARE WORKING IN THIS AREA IN ALL OF OUR PILLARS, AND
18 WE CAN FIGURE OUT TOGETHER WHAT IT'S GOING TO TAKE
19 TO MOVE NEURO TO THE NEXT STAGE AND TO TREAT AS MANY
20 OF THOSE, AND YOU SEE NEURO PATIENTS AS HAPPY AS THE
21 ONES FOR THE SCID BABIES. SO WE ARE DETERMINED TO
22 ACTUALLY FIGURE OUT HOW TO GET THERE.

23 DR. HIGGINS: THANK YOU.

24 CHAIRMAN THOMAS: JUDY.

25 DR. GASSON: I JUST WANTED TO ENDORSE WHAT

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1 MARIA MILLAN JUST SAID. UNDER PROP 71 WE WERE ABLE
2 TO FUND NEURODEGENERATION DISORDERS. AND MANY OF
3 THE STUDIES THAT WE'VE BEEN TALKING ABOUT TODAY, I
4 BELIEVE, ARE IN AREAS LIKE PARKINSON'S AND
5 ALZHEIMER'S. WHAT IS NEW ABOUT PROP 14 IS THE \$1.5
6 BILLION THAT IS REALLY EARMARKED FOR CNS AND
7 PSYCHIATRIC DISORDERS, INCLUDING ADDICTION,
8 DEPRESSION, BIPOLAR, SCHIZOPHRENIA, AND SOME OF
9 THOSE DISORDERS. SO I'M VERY EXCITED TO HEAR THAT
10 WE CAN ALL WORK TOGETHER TO COME UP WITH A WAY TO
11 HAVE A REAL IMPACT IN THESE DISEASES WHICH ARE VERY
12 DEVASTATING TO FAMILIES AND ARE ALSO VERY MUCH
13 UNEQUALLY REPRESENTED IN UNDERSERVED COMMUNITIES FOR
14 A VARIETY OF REASONS. SO I THINK THIS IS REALLY
15 IMPORTANT. THANK YOU, MARIA, FOR YOUR COMMENTS.

16 CHAIRMAN THOMAS: OKAY. ANY OTHER HANDS
17 RAISED HERE?

18 DR. CREASEY: WE HAVE --

19 CHAIRMAN THOMAS: AL.

20 MR. ROWLETT: I WOULD BE REMISS AS THE
21 PATIENT ADVOCATE REPRESENTING MENTAL HEALTH NOT TO
22 ENTHUSIASTICALLY SAY THANK YOU TO JUDY FOR HER
23 LEADERSHIP AS A MEMBER OF THIS BOARD, ALWAYS IN THE
24 AREA OF CNS AND OF PEOPLE -- FOR PEOPLE BEING
25 AFFECTED BY PSYCHIATRIC DISORDERS SUCH AS

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1 SCHIZOPHRENIA AND OTHER AFFECTIVE DISORDERS THAT SHE
2 INDICATED. AND TO SAY TO STAFF THAT I HAVE THE
3 UNIQUE PRIVILEGE OF WORKING WITH PEOPLE FROM
4 UNDERREPRESENTED, UNDERSERVED COMMUNITIES AND
5 UNDERSTAND THEIR HOPE FOR A CURE. AND I KNOW THAT
6 SOMETIMES THAT THOSE PHRASES SEEM ALMOST
7 INCONCEIVABLY UNREACHABLE, BUT THEY ARE REACHABLE
8 BECAUSE AS, AGAIN, DAVID SAID, THIS IS A WONDERFUL
9 ORGANIZATION WITH VERY TALENTED PEOPLE THAT ARE VERY
10 COMMITTED TO THIS PURPOSE. I ENTHUSIASTICALLY
11 ENDORSE YOU BRINGING BACK REGULAR REPORTS ON NOT
12 ONLY HOW THE FUNDS ARE BEING ALLOCATED, BUT THE
13 EFFECTIVENESS OF SOME OF THE GRANTS ASSOCIATED WITH
14 CNS AND PSYCHIATRIC DISORDERS.

15 CHAIRMAN THOMAS: THANK YOU, AL. LET'S
16 SEE. MARV.

17 DR. SOUTHARD: AND I JUST WANTED TO
18 ENTHUSIASTICALLY SUPPORT WHAT JUDY AND AL SAID. I
19 THINK THIS IS REALLY A CRUCIAL AREA, AND WE NEED TO
20 KEEP OUR FOCUS THERE. THANK YOU.

21 CHAIRMAN THOMAS: THANK YOU. ANY OTHER
22 COMMENTS FROM MEMBERS OF THE BOARD? ABLA, I DON'T
23 SEE ANY UP THERE. MARIA, DO YOU SEE ANY OTHERS?

24 MS. BONNEVILLE: NO.

25 CHAIRMAN THOMAS: OKAY. ABLA, THANK YOU

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1 VERY MUCH FOR THAT PRESENTATION. I THINK IT'S
2 INDICATIVE OF THE BEST-IN-CLASS WORK THAT THE ENTIRE
3 CIRM FAMILY HAS ENABLED AND IS A REAL BEACON OF HOPE
4 TO PATIENTS FOR ALL THOSE CONDITIONS AS WELL AS THE
5 MANY OTHERS FOR WHICH WE HAVE FUNDED RESEARCH. SO
6 CONGRATULATIONS TO THE TEAM.

7 I JUST WANTED TO MAKE ONE COMMENT, WHICH
8 IS I DIDN'T WANT THE DISCUSSION OF CAPS TO PASS
9 WITHOUT COMMENT. ONE OF THE THINGS, THE MANY THINGS
10 THAT CIRM DOES THAT SEPARATES IT FROM OTHER MAJOR
11 GRANT-MAKING ENTITIES IN THE SPACE IS THE
12 INVOLVEMENT THAT CIRM HAS THROUGHOUT THE, IN THIS
13 CASE, CLINICAL TRIAL PROCESSES OF THE VARIOUS
14 PROJECTS. MOST GRANT-MAKING AGENCIES GIVE AWARDEES
15 THEIR FUNDS AND SAY CONGRATULATIONS, BEST OF LUCK,
16 AND THERE'S LITTLE TO NO FOLLOW UP.

17 THE CAPS ARE A MAJOR CHANGE FROM THE NORM
18 AND IS SOMETHING, AS ABLA DISCUSSED, THAT ALLOWS FOR
19 PROJECTS TO BE ENHANCED MIDSTREAM AND TO GIVE THEM A
20 BETTER SHOT AT SUCCESS. AND THAT IS A MAJOR
21 DIFFERENTIATOR AMONG SEVERAL FOR WHAT WE DO IN THE
22 PROCESS THAT WE HAVE IN PLACE. SO, ABLA AND MARIA,
23 CONGRATULATIONS ON ALL OF THAT. 356 CAPS IS A LOT
24 OF CAPS OVER THE LAST SIX YEARS, AND THE RESULTS ARE
25 CLEAR. SO I JUST WANTED TO ELABORATE A BIT FOR THE

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1 BOARD ON THAT.

2 MR. TORRES: MR. CHAIRMAN.

3 CHAIRMAN THOMAS: YES, SENATOR TORRES.

4 MR. TORRES: I JUST WANTED TO ADD MY
5 THANKS TO MARIA AND TO ABLA. I'VE WORKED VERY
6 CLOSELY WITH ABLA ON A NUMBER OF ISSUES, ESPECIALLY
7 IN THE NEUROLOGICAL FIELD, BUT ALSO WE OWE A DEBT OF
8 GRATITUDE TO BOB KLEIN. THIS WAS INCLUDED BECAUSE
9 OF HIS INSISTENCE THAT NEUROLOGICAL DISEASES NEEDED
10 TO BE HIGHLIGHTED WITHIN THE INITIATIVE. SO WHEN
11 PROP 14 WAS BEING DRAFTED, HE REALLY TOOK A
12 COURAGEOUS STAND BECAUSE IT WAS NOT A UNANIMOUS
13 DECISION AMONG THE SCIENTISTS THAT WE SHOULD CARVE
14 OUT A SPECIFIC AREA FOR NEUROLOGICAL DISEASES. AND
15 1.5 BILLION, AS DAVID HAS JUST SAID, IS FANTASTIC;
16 BUT, AGAIN, A THANK YOU TO BOB KLEIN.

17 CHAIRMAN THOMAS: THANK YOU, ART. PAT.

18 DR. LEVITT: PROBABLY WHAT I'M GOING TO
19 SAY IS UNPOPULAR. I DON'T KNOW. BUT I'VE BEEN A
20 WORKING -- I'M AN ACTIVE NEUROSCIENTIST DOING
21 RESEARCH ON SCHIZOPHRENIA AND AUTISM AND OTHER
22 DISORDERS OF THE NERVOUS SYSTEM FOR A VERY LONG
23 PERIOD OF TIME BECAUSE I'M OLD. SOME OF YOU MAY OR
24 MAY NOT REMEMBER, BUT BACK IN 1995 DURING THE DECADE
25 OF THE BRAIN, JERRY FISCHBACH WAS HEAD OF NINDS AT

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1 THAT TIME, WENT TO CONGRESS MAKING PROMISES ABOUT
2 CURING PARKINSON'S DISEASE IN FIVE OR SIX YEARS AS
3 LONG AS THERE WAS AN INCREASE IN FUNDING. SO I GIVE
4 THAT AS AN EXAMPLE.

5 I LOVE THE ENTHUSIASM. I THINK THIS IS A
6 REALLY IMPORTANT AREA, AND I THINK THAT THE PROGRAM
7 FOLKS, I THINK, HAVE SOME REALLY GREAT PLANS ABOUT
8 ENCOURAGING MORE APPLICATIONS, HIGHER QUALITY THAT
9 ARE REALLY GOING TO TRY TO ADDRESS WHAT HAS BEEN
10 PROBABLY THE BIGGEST BIOMEDICAL CHALLENGE WE FACE.
11 THE BRAIN IS COMPLICATED, AND THE DISEASES OF THE
12 BRAIN AND THE NERVOUS SYSTEM IN GENERAL ARE QUITE
13 COMPLICATED, WHICH IS WHY WE DON'T HAVE CURES.
14 WE'VE BEEN WORKING ON THIS FOR SIXTY PLUS YEARS OR
15 MORE WITH MODERN SCIENCE.

16 SO I JUST SAY THIS, THAT WE BE
17 ENTHUSIASTIC, BUT REMEMBER HOW WE COMMUNICATE THIS,
18 THAT WE DON'T WANT TO BUILD A BRIDGE TOO FAR AND
19 SUGGEST THAT WE ARE ON THE VERGE OF BEING ABLE TO
20 COME UP WITH GREAT APPROACHES TO CURING X, Y, AND Z.
21 I SAY THAT BECAUSE -- AND I KNOW JERRY FISCHBACH
22 WELL. I KNEW HIM FOR A LONG TIME. BUT WHAT HE
23 SAID, AND THERE ARE OTHERS WHO DO THE SAME THING,
24 DID DAMAGE TO THE FUNDING OF AREAS LIKE THIS AT THE
25 NIH. I JUST WANT US TO BE CONFIDENTLY CAUTIOUS

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1 ABOUT HOW WE COMMUNICATE WHAT WE ARE DOING IN THIS
2 AREA. MEETING THE GOALS OF THE PROPOSITION, WHICH
3 I'M ENTHUSIASTIC ABOUT, WHAT I HEARD TODAY WAS
4 FANTASTIC. SO I'M A BIG SUPPORTER, BUT WE HAVE TO
5 COMMUNICATE THIS IN A TEMPERED WAY BECAUSE THIS IS
6 NOT CANCER. THIS IS REALLY -- CANCER IS
7 COMPLICATED. THIS IS A DIFFERENT DEGREE OF
8 COMPLICATION.

9 CHAIRMAN THOMAS: THANK YOU. YES. PLEASE
10 GO AHEAD, MIKE.

11 DR. BOTCHAN: I'D JUST LIKE TO SECOND
12 THAT, AND I WON'T REITERATE EVERYTHING HE SAID, BUT
13 I'D LIKE TO CALL PEOPLE'S ATTENTION TO THE
14 ORGANIZATION THAT'S VERY WELL FUNDED. RANDY
15 SCHEKMAN AT UC BERKELEY HAS PARKINSON'S NOW. AND
16 THE PREMISE THERE IS THAT WE NEED MORE BASIC
17 RESEARCH. AND THAT WITHOUT REAL BASIC RESEARCH, WE
18 ARE STILL SORT OF FUMBLING AROUND. IT REMINDS ME
19 PERSONALLY OF WHAT HAPPENED WITH THE WAR ON CANCER
20 THAT NIXON LAUNCHED. IT TOOK ALMOST A DECADE AND A
21 HALF BEFORE WE ACTUALLY UNDERSTOOD WHAT ONCOGENES
22 AND TUMOR SUPPRESSION WERE. AND ASIDE FROM THE
23 COMPLEXITIES OF THE BRAIN THAT WE JUST HEARD ABOUT
24 FROM AN EXPERT, I THINK THAT THERE ARE INDICATIONS
25 THAT SOMATIC MUTATIONS MAY OCCUR IN STEM CELLS IN

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1 THE BRAIN IN PROCESSES THAT SORT OF MIMIC WHAT
2 HAPPENS IN CANCER. AND UNTIL WE UNDERSTAND THE
3 GENETIC COMPONENT, WE MAY BE SORT OF GRAPPLING WITH
4 A COMPLEXITY THAT WE JUST CAN'T FATHOM NOW.

5 SO I THINK IT'S IMPORTANT FOR US TO FUND
6 THIS KIND OF STUFF IN BASIC RESEARCH AS WELL AS THE
7 CLINICAL APPLICATIONS.

8 CHAIRMAN THOMAS: THANK YOU, MIKE. AND,
9 PAT, FOR YOUR CAUTIONARY REMARKS, I THINK WE GO TO
10 GREAT LENGTHS TO NOT OVERSTATE ANYTHING THAT WE
11 THINK WE'RE GOING TO BE ABLE TO DO. WE ARE VERY
12 CAREFUL ABOUT THAT. AND WE REPORT THE PROGRESS ON
13 PROJECTS AS IT COMES WITHOUT HYPERBOLE. I DON'T
14 THINK ANYBODY FOR A SECOND DOUBTS THE COMPLEXITY IN
15 THE NEURO SPACE OR IN MANY OF THE OTHER SPACES WE'RE
16 DEALING WITH. THIS IS REALLY TOUGH STUFF, WHICH IS
17 WHY WE ARE INVOLVED IN IT. SO THANK YOU VERY MUCH
18 FOR THOSE REMARKS.

19 ANY OTHER COMMENTS? OKAY. MARIA, DOES
20 THAT CONCLUDE THE PRESIDENT'S REPORT?

21 DR. MILLAN: YES, IT DOES.

22 CHAIRMAN THOMAS: OKAY. THANK YOU VERY
23 MUCH. AND, AGAIN, CONGRATULATIONS TO THE TEAM.
24 THANK YOU, ABLA, FOR AN EXCELLENT PRESENTATION.

25 WE'RE GOING GO NOW INTO -- I'M GOING TO

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1 SKIP THE CONSENT ITEMS, PUT THAT TOWARDS THE END.
2 WE'RE GOING TO GO INTO THE ACTION ITEMS. I WANT TO
3 NOTE IN ADVANCE, WE HAVE A BIT OF ANOMALY. WE HAVE
4 THE GOOD FORTUNE AT 11 O'CLOCK ON THE NOSE TO HAVE
5 SENATOR ANTHONY PORTANTINO, WHO'S GOING TO BE
6 ADDRESSING ITEM NO. 10, SB 987, CALLING IN AT THAT
7 MOMENT. SO WHATEVER WE ARE DOING AT 11 O'CLOCK, WE
8 WILL CUT TO SENATOR TORRES AND SENATOR PORTANTINO.
9 SO I JUST WANTED TO ALERT EVERYBODY TO THAT.

10 SO NOW WE'RE GOING INTO THE APPLICATION
11 REVIEW SUBCOMMITTEE FOR ITEM NO. 6 ON THE ACTION
12 AGENDA, WHICH IS CONSIDERATION OF APPLICATIONS
13 SUBMITTED IN RESPONSE TO CLINICAL TRIAL STAGE
14 PROJECTS PROGRAM ANNOUNCEMENT CLIN1 OR 2. WE'RE
15 GOING TO HAVE A PRESENTATION ON THIS ITEM BY DR.
16 SAMBRANO.

17 DR. SAMBRANO: OKAY. THANK YOU, MR.
18 CHAIRMAN. LET ME PUT UP THIS PRESENTATION. GOOD
19 MORNING, EVERYONE. SO AS MENTIONED, I'M GOING TO
20 PRESENT THE RECOMMENDATIONS FROM LAST MONTH'S GRANTS
21 WORKING GROUP REVIEW OF CLINICAL APPLICATIONS.

22 JUST A QUICK REMINDER OF OUR MISSION. I
23 KNOW YOU ALREADY SAW THIS, BUT JUST TO NOTE THAT WE
24 ALSO PRESENT THIS DURING OUR GRANTS WORKING GROUP
25 MEETINGS JUST TO MAKE SURE THAT EVERYBODY GOING INTO

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1 THE REVIEW IS ON THE SAME PAGE AS TO WHAT WE ARE
2 STRIVING TO DO AT CIRM.

3 THIS IS A REMINDER OF THE CLINICAL BUDGET
4 STATUS TO NOTE THAT WE HAVE STARTED A NEW FISCAL
5 YEAR. SO WE ARE KIND OF HAVING A FRESH START HERE
6 WITH 169 MILLION ALLOCATED TO THE CLINICAL PROGRAM.
7 SO THE AMOUNT REQUESTED TODAY WITH THE TWO
8 APPLICATIONS WOULD BE 7.8 MILLION IF APPROVED, WHICH
9 WOULD LEAVE US ABOUT 154 MILLION IN THAT BUDGET.

10 THE SCIENTIFIC SCORING SYSTEM THAT IS USED
11 TO ASSESS THESE APPLICATIONS IS BASED ON A SCALE OF
12 1, 2, OR 3. A SCORE OF 1 MEANS THAT AN APPLICATION
13 HAS EXCEPTIONAL MERIT AND WARRANTS FUNDING. A SCORE
14 OF 2 NEEDS IMPROVEMENT, AND TYPICALLY THOSE GO BACK
15 TO THE APPLICANT FOR REVISIONS, COME BACK TO THE
16 GRANTS WORKING GROUP OVER A COUPLE OF MONTHS PERIOD
17 TO REASSESS. THOSE THAT GET A SCORE OF 3 ARE
18 SUFFICIENTLY FLAWED THAT THEY KIND OF NEED TO GO
19 BACK TO THE DRAWING BOARD, AND WE WON'T ACCEPT THOSE
20 BACK FOR AT LEAST SIX MONTHS.

21 THE REVIEW CRITERIA THAT ARE UTILIZED TO
22 COME UP WITH THAT SCORE OF 1, 2, OR 3 ARE BASED ON
23 THESE FIVE QUESTIONS. FIRST, DOES THE PROJECT HOLD
24 THE NECESSARY SIGNIFICANCE AND POTENTIAL FOR IMPACT?
25 MEANING WHAT VALUE IT IS OFFERING. AND IS THE

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1 RATIONALE SOUND? IS THE PROJECT WELL-PLANNED AND
2 DESIGNED? AND IS IT FEASIBLE, INCLUDING WHETHER
3 THEY HAVE AN APPROPRIATE, QUALIFIED TEAM AND ALL THE
4 RESOURCES TO CARRY OUT THE PROJECT? AND THEN THE
5 FIFTH QUESTION IS DOES THE PROJECT ADDRESS THE NEEDS
6 OF UNDERSERVED COMMUNITIES?

7 THE GRANTS WORKING GROUP ITSELF HAS A
8 COMPOSITION THAT INCLUDES DIFFERENT ROLES. THOUGH
9 WE DO HAVE THE SCIENTIFIC GRANTS WORKING GROUP
10 MEMBERS THAT ARE APPOINTED BY THE BOARD, ALL
11 EX-CALIFORNIA INDIVIDUALS, MEANING OUTSIDE OF
12 CALIFORNIA. THEY CONDUCT THE SCIENTIFIC EVALUATION,
13 THEY BRING IN EXPERTISE FROM A VARIETY OF AREAS FROM
14 DISEASE, CLINICAL, REGULATORY, CMC, AND SO ON, AND
15 THEY PROVIDE THE SCIENTIFIC SCORE THAT YOU SEE ON
16 THESE APPLICATIONS.

17 BUT AS PART OF THE GRANTS WORKING GROUP,
18 WE ALSO HAVE OUR PATIENT ADVOCATE AND NURSE MEMBERS
19 WHO ARE ALSO MEMBERS OF THE ICOC. AND THEIR ROLE IS
20 TO CONDUCT THE DEI EVALUATION, PROVIDE A PATIENT
21 PERSPECTIVE ON THE IMPACTS, SIGNIFICANCE OF THE
22 PROJECTS, AND ALSO JUST PROVIDE OVERSIGHT ON THE
23 REVIEW PROCESS ITSELF. SO THESE MEMBERS PROVIDE A
24 DEI SCORE ON ALL OF THE APPLICATIONS THAT YOU WILL
25 SEE IN THE SUMMARIES THAT WERE PROVIDED. AND DURING

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1 THE REVIEW, THEY ALSO PROVIDE A SUGGESTED SCIENTIFIC
2 SCORE.

3 WE ALSO HAVE SCIENTIFIC SPECIALISTS WHO
4 PARTICIPATE. THESE ARE NONVOTING MEMBERS WITH
5 SCIENTIFIC AREAS OF EXPERTISE THAT HELP US FILL IN
6 GAPS WHEN WE NEED. THEY PROVIDE AN INITIAL, BUT NOT
7 FINAL SCIENTIFIC SCORE DURING THE COURSE OF THE
8 REVIEW. SO THAT SERVES AS BACKGROUND.

9 THIS IS A SLIDE JUST TO REMIND ALL BOARD
10 MEMBERS WHO HAVE CONFLICTS OF INTEREST WITH THE TWO
11 APPLICATIONS THAT WE ARE CONSIDERING TODAY AS SHOWN
12 HERE. THE CLIN2, WHICH IS THE CLINICAL TRIAL GRANT,
13 AND THEN THE CLIN1, WHICH IS A PROPOSAL FOR
14 IND-ENABLING STUDIES. SO JUST TAKE A NOTE OF THAT
15 AND REMEMBER THAT YOU ARE RECUSED FROM SPEAKING ON
16 THESE APPLICATIONS.

17 SO THE FIRST APPLICATION TO BE CONSIDERED
18 IS CLIN2-13267. THE TITLE OF THIS APPLICATION IS
19 "PHASE 1 TREATMENT OF URETHRAL STRICTURES IN
20 HUMANS." SO THIS THERAPY IS AN ENGINEERED SCAFFOLD
21 WITH CELLS MADE FROM AUTOLOGOUS PROGENITOR CELLS.
22 THAT INCLUDES SMOOTH MUSCLE AND UROTHELIAL CELLS.
23 AND THE INDICATION IS FOR PATIENTS THAT HAVE LONG
24 URETHRAL STRICTURES THAT CAN'T BE TREATED WITH
25 CURRENT METHODS.

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1 THE GOAL IS TO COMPLETE A PHASE 1 CLINICAL
2 TRIAL TO ASSESS SAFETY AND FEASIBILITY OF THIS
3 APPROACH. THE FUNDS REQUESTED IS 3.8 MILLION FOR
4 THIS PROGRAM.

5 LITTLE BACKGROUND ON STRICTURE DISEASE OR
6 THE OCCURRENCE OF STRICTURES. THESE OCCUR FOR A
7 VARIETY OF REASONS. SOME ARE CONGENITAL, SOME MAY
8 BE DUE TO DISEASE OR TRAUMATIC INJURY SO THEY CAN
9 HAVE A PROFOUND EFFECT ON THE QUALITY OF LIFE OF
10 INDIVIDUALS RESULTING IN INFECTION, BLADDER STONES,
11 FISTULAS, SEPSIS, AND EVENTUALLY RENAL FAILURE.

12 THE VALUE PROPOSITION FOR THIS PROPOSED
13 THERAPY, THE CURRENT STANDARD OF CARE FOR THE LONG
14 SEGMENT STRICTURES INCLUDES AN INTERNAL URETHROTOMY,
15 URETHROPLASTY, AND RECONSTRUCTION USING GRAFTS OR
16 VASCULARIZED FLAPS. AND THE STRICTURE RECURRENCE,
17 ALONG WITH INFECTIONS AND OTHER COMPLICATIONS, ARE
18 QUITE COMMON WITH THESE TECHNIQUES, PARTICULARLY FOR
19 THOSE LONG STRICTURES. AND SO THIS PROPOSED THERAPY
20 OFFERS THE POTENTIAL FOR A LIFELONG CURE FOR THOSE
21 STRICTURES AND ELIMINATES THE COMPLICATIONS THAT ARE
22 ASSOCIATED WITH THESE THERAPIES.

23 WHY IS THIS A STEM CELL OR GENE THERAPY
24 PROJECT? THIS UTILIZES UROTHELIAL AND MUSCLE
25 PROGENITOR CELLS AS PART OF THE MANUFACTURING

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1 PROCESS TO CREATE THESE GRAFTS.

2 OUR PORTFOLIO HAS VERY LITTLE IN TERMS OF
3 PROJECTS THAT ARE SIMILAR TO THIS. SO THIS IS TO
4 REPRESENT OUR ACTIVE PORTFOLIO PROJECTS. THE
5 CLOSEST THING WE HAVE IS A TRANSLATIONAL PROJECT
6 THAT IS FOCUSED ON URINARY INCONTINENCE THAT USES
7 IPSC-DERIVED SMOOTH MUSCLE CELLS TO TRANSPLANT INTO
8 THE URETHRA MUSCLE TO REGENERATE THE WEAK URETHRA.
9 SO THAT'S THE CLOSEST THING WE HAVE. OTHERWISE
10 THERE'S NOTHING SPECIFICALLY FOR URETHRAL STRICTURES
11 IN OUR PORTFOLIO. AND THIS PARTICULAR APPLICANT HAS
12 NOT PREVIOUSLY RECEIVED A CIRM AWARD.

13 SO THE RECOMMENDATION FROM THE GRANTS
14 WORKING GROUP FOR THIS APPLICATION IS A SCORE OF 1
15 WITH ALL MEMBERS GIVING IT A SCORE OF 1 AND NO ONE
16 GIVING IT A SCORE OF 2 OR 3. THE DEI SCORE HAS A
17 MEDIAN SCORE OF 7. AND THE CIRM TEAM RECOMMENDATION
18 IS TO FUND IN CONCURRENCE WITH THE GRANTS WORKING
19 GROUP RECOMMENDATION FOR 3.8 MILLION. SO I WILL
20 PAUSE HERE FOR ANY QUESTIONS AND APPROVAL. MR.
21 CHAIRMAN.

22 CHAIRMAN THOMAS: THANK YOU VERY MUCH,
23 GIL. DO WE HAVE A MOTION TO APPROVE?

24 DR. DULIEGE: I MOVE.

25 CHAIRMAN THOMAS: THANK YOU, ANNE-MARIE.

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1 IS THERE A SECOND?

2 MR. ROWLETT: I SECOND.

3 CHAIRMAN THOMAS: THANK YOU, AL.

4 QUESTIONS OR COMMENTS FROM MEMBERS OF THE
5 BOARD? HEARING NONE, ANY QUESTIONS OR COMMENTS FROM
6 THE PUBLIC, OR COMMENTS FROM THE PUBLIC I SHOULD
7 SAY.

8 MS. BONNEVILLE: THERE ARE NO HANDS
9 RAISED, J.T.

10 CHAIRMAN THOMAS: OKAY. THANK YOU VERY
11 MUCH. MARIA, WILL YOU PLEASE CALL THE ROLL.

12 MS. BONNEVILLE: DAN BERNAL. LEONDR
13 CLARK-HARVEY.

14 MS. CLARK-HARVEY: YES.

15 MS. BONNEVILLE: ANNE-MARIE DULIEGE.

16 DR. DULIEGE: YES.

17 MS. BONNEVILLE: MARK FISCHER-COLBRIE.

18 DR. FISCHER-COLBRIE: THAT'S AN AYE FROM
19 MARK FISCHER-COLBRIE.

20 MS. BONNEVILLE: FRED FISHER.

21 DR. FISHER: YES.

22 MS. BONNEVILLE: DAVID HIGGINS.

23 DR. HIGGINS: (THUMBS UP.)

24 MS. BONNEVILLE: RICH LAJARA.

25 MR. LAHARA: YES.

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1 MS. BONNEVILLE: LAUREN MILLER-ROGEN.
2 MS. MILLER-ROGEN: YES.
3 MS. BONNEVILLE: ADRIANA PADILLA.
4 DR. PADILLA: YES.
5 MS. BONNEVILLE: JOE PANETTA. AL ROWLETT.
6 MR. ROWLETT: YES.
7 MS. BONNEVILLE: MARVIN SOUTHARD.
8 DR. SOUTHARD: YES.
9 MS. BONNEVILLE: JONATHAN THOMAS.
10 CHAIRMAN THOMAS: YES.
11 MS. BONNEVILLE: KAROL WATSON.
12 THE MOTION CARRIES.
13 CHAIRMAN THOMAS: THANK YOU VERY MUCH,
14 MARIA. GIL, ANY OTHER COMMENTS?
15 DR. SAMBRANO: NO, JUST THE NEXT
16 APPLICATION.
17 CHAIRMAN THOMAS: OKAY. THANK YOU.
18 PLEASE PROCEED.
19 DR. SAMBRANO: THANK YOU. SO THE NEXT
20 APPLICATION IS CLIN1-13315. AND SO THIS
21 APPLICATION, JUST TO NOTE, WAS PREVIOUSLY PRESENTED
22 TO THE APPLICATION REVIEW SUBCOMMITTEE A COUPLE OF
23 MONTHS AGO IN APRIL. AND SO, ALTHOUGH IT DID
24 RECEIVE A SCORE OF 1 AND WHY IT WAS BEING PRESENTED,
25 THE VOTES WERE PRETTY CLOSE AND SPLIT WITH EIGHT

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1 VOTING FOR A SCORE OF 1 AND SEVEN MEMBERS SCORING
2 FOR A SCORE OF 2 OUT OF THE GRANTS WORKING GROUP.
3 IT ALSO HAD A RELATIVELY LOW DEI SCORE. AND SO THE
4 APPLICATION REVIEW SUBCOMMITTEE REQUESTED THAT THE
5 APPLICANTS REVISE THEIR APPLICATION AND THAT THE
6 GRANTS WORKING GROUP REEVALUATE THOSE REVISIONS
7 BEFORE IT COMES BACK TO THE APPLICATION REVIEW
8 SUBCOMMITTEE.

9 SO WE HAVE TAKEN IT THROUGH THAT PROCESS.
10 THE GRANTS WORKING GROUP HAS LOOKED AT IT AGAIN. SO
11 I WILL REVIEW THE SUMMARY OF WHAT OCCURRED WITH
12 THOSE REVISIONS.

13 SO THE TITLE OF THIS APPLICATION THEN IS
14 "HEMATOPOIETIC STEM CELL GENE THERAPY FOR X-LINKED
15 CHRONIC GRANULOMATOUS DISEASE (XCGD)." IT IS AN
16 AUTOLOGOUS THERAPY THAT IS BEING PROPOSED TO CORRECT
17 THE GENE DEFECT IN HEMATOPOIETIC STEM CELLS. AND,
18 OF COURSE, THE INDICATION IS FOR XCGD PATIENTS,
19 WHICH IS A RARE DISEASE THAT PROBABLY OCCURS ONLY IN
20 ABOUT TEN PATIENTS PER YEAR OR AT LEAST THAT'S THE
21 ESTIMATE.

22 THE GOAL IS TO COMPLETE IND-ENABLING
23 STUDIES AND SUBMIT THEIR IND. THE FUNDS REQUESTED
24 IS JUST UNDER FOUR MILLION WITH CO-FUNDING PROVIDED
25 BY THE APPLICANT OF JUST UNDER A MILLION.

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1 SOME BACKGROUND ON XCGD. THIS IS A RARE,
2 AS MENTIONED, IMMUNE DISORDER THAT PREVENTS WHITE
3 BLOOD CELLS FROM ESSENTIALLY KILLING FOREIGN
4 INVADERS. AND SO THIS RESULTS IN VERY SEVERE,
5 RECURRENT INFECTIONS THAT IMPACT QUALITY OF LIFE AND
6 THE LENGTH OF THE PATIENT'S LIFE. THIS CONDITION IS
7 USUALLY DIAGNOSED BEFORE AGE 5; BUT WITHOUT
8 TREATMENT, CHILDREN MAY DIE BEFORE THE AGE OF 10.

9 SO THE VALUE PROPOSITION FOR THE PROPOSED
10 THERAPY, CURRENT STANDARD OF CARE INVOLVES ONGOING
11 ANTIBACTERIAL, ANTIFUNGAL PROPHYLAXIS, AND
12 ALLOGENEIC HEMATOPOIETIC STEM CELL TRANSPLANT. SO
13 THE ALLOGENEIC TRANSPLANT CAN BE CURATIVE, BUT IT
14 ALSO COMES WITH MANY SIDE EFFECTS, INCLUDING GRAFT
15 VERSUS HOST DISEASE AND OTHER COMPLICATIONS. SO, IF
16 SUCCESSFUL, THE PROPOSED THERAPY DOES OFFER PATIENTS
17 THE POTENTIAL FOR IMMUNE RESTORATION AND A CURE.

18 THE PROJECT IS A STEM CELL OR GENE THERAPY
19 BECAUSE THE THERAPY ITSELF IS COMPOSED OF
20 GENE-MODIFIED HEMATOPOIETIC STEM CELLS.

21 OTHER PROJECTS IN OUR ACTIVE CIRM
22 PORTFOLIO THAT ARE SIMILAR, WE DO HAVE A CLINICAL
23 TRIAL PROJECT SUPPORTING A PHASE 1-2 TRIAL FOR XCGD
24 THAT USES AUTOLOGOUS GENE CORRECTED CD34 POSITIVE
25 CELLS. AND THE MECHANISM IS SIMILAR, LENTIVIRAL

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1 VECTOR CORRECTION OF THE GENE DEFECT. THE TEAM THAT
2 IS FUNDED TO DO THIS WORK OVERLAPS WITH THE TEAM OF
3 THE CURRENT PROPOSAL. SO THIS NEW PROPOSAL IS SORT
4 OF A NEXT GENERATION THERAPY THAT USES THE
5 LENTIVECTOR APPROACH FOR THIS.

6 THIS PARTICULAR APPLICANT, BECAUSE THEY
7 ARE COMING IN AS A NEW ENTITY, HAS NOT PREVIOUSLY
8 RECEIVED A CIRM AWARD, BUT, AS MENTIONED, SOME OF
9 THE MEMBERS THAT ARE INVOLVED IN THE PROJECT
10 CERTAINLY HAVE.

11 THE RECOMMENDATION FROM THE GRANTS WORKING
12 GROUP, AND I'M GOING TO SHOW YOU HERE A COMPARISON
13 BASICALLY BETWEEN THE CURRENT GRANTS WORKING GROUP
14 VOTE WHERE IT RECEIVED A UNANIMOUS SCORE OF 1 BY 15
15 MEMBERS COMPARED TO THE PREVIOUS GRANTS WORKING
16 GROUP WHERE IT HAD RECEIVED EIGHT VERSUS SEVEN
17 VOTES. SO A UNANIMOUS SCORE OF 1. IT ALSO RECEIVED
18 A DEI SCORE OF 7. THE PREVIOUS DEI SCORE HAD BEEN A
19 5.5. SO IMPROVEMENT ON BOTH ACCOUNTS. AND SO THE
20 CIRM RECOMMENDATION IS FUND THIS PROPOSAL WITH THE
21 RECOMMENDATION FROM THE GRANTS WORKING GROUP AND FOR
22 THE AWARD AMOUNT OF 3.99 MILLION. MR. CHAIRMAN.

23 CHAIRMAN THOMAS: THANK YOU, GIL. DO WE
24 HAVE A MOTION TO APPROVE?

25 MR. ROWLETT: SO MOVED.

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1 CHAIRMAN THOMAS: THANK YOU, AL.

2 SECOND?

3 DR. LO: SECOND.

4 CHAIRMAN THOMAS: DAVID GOT IN THERE

5 FIRST. THANK YOU VERY MUCH.

6 COMMENTS OR QUESTIONS FROM MEMBERS OF THE
7 BOARD? ANNE-MARIE.

8 DR. DULIEGE: CAN YOU GIVE US A BIT MORE
9 OF YOUR PERSPECTIVE AND THAT OF YOUR TEAM ABOUT AN
10 APPLICATION THAT WAS SUBOPTIMAL TO BEGIN WITH, IS
11 COMING SLIGHTLY BETTER, BUT STILL SORT OF AVERAGE?
12 WHAT'S GOING ON THERE? THANK YOU.

13 DR. SAMBRANO: SO THE APPLICATION, AT
14 LEAST FROM THE SCIENTIFIC PERSPECTIVE, I THINK CAME
15 BACK MUCH STRONGER. I MEAN THERE WAS A UNANIMOUS
16 SCORE OF 1 FROM THE GRANTS WORKING GROUP MEMBERS.
17 THE DEI SCORE MOVED UP TO A 7. SO IT'S CERTAINLY
18 NOT A 10. I THINK I WOULD MAYBE REQUEST SOME OF OUR
19 BOARD MEMBERS WHO WERE THERE IF THEY WANT TO SPEAK
20 TO SOME OF THE RATIONALE BEHIND NOT ACHIEVING A
21 PERFECT SCORE IN TERMS OF THE DEI.

22 CHAIRMAN THOMAS: AL, WERE YOU GOING TO
23 SPEAK TO THAT ISSUE BY ANY CHANCE?

24 MR. ROWLETT: I WILL CERTAINLY ATTEMPT TO.
25 FIRST, I WILL ASSERT THAT THE DEI SCORE, INITIAL DEI

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1 SCORE, DID INFLUENCE THE OUTCOME OF THIS
2 APPLICATION. AND SO I'LL PAUSE AND ANECDOTALLY, AND
3 I'LL TAKE THE CRITICISM LATER, SAY, YSABEL, THAT'S
4 JUST FOR YOU. BUT WE GOT THE MESSAGE, AND THE GWG
5 REALLY IS BEGINNING TO APPRECIATE THE SIGNIFICANCE
6 AND IMPORTANCE OF DEI AS IT PERTAINS TO
7 UNDERREPRESENTED, UNDERSERVED COMMUNITIES.

8 MORE IMPORTANTLY, I THINK STAFF HAS DONE A
9 VERY GOOD JOB AT PROVIDING US WITH A RUBRIC THAT
10 ELIMINATES SUBJECTIVE SCORING, AND IT AFFORDS US
11 WITH A WAY TO OBJECTIVELY SCORE THE APPLICATIONS.
12 AND WHEN YOU SAY THAT TO THE SCIENTIFIC EVALUATORS,
13 FROM THE OPINION OF ONE, THEY GET IT. AND SO FROM
14 THE DEI PERSPECTIVE, MOVING FROM A 5.5 TO A 7 MAY
15 NOT BE MONUMENTAL; HOWEVER, A 5.5 INITIALLY IS NOT
16 FUNDABLE. AND THAT, AGAIN, IS HOW I APPRECIATED
17 THIS PART OF THE PROCESS.

18 CHAIRMAN THOMAS: THANK YOU, AL. YSABEL.

19 MS. DURON: THANKS, AL, FOR YOUR
20 PERSPECTIVE. IT IS SO CRITICAL TO HEAR WHEN YOU'RE
21 SITTING ON THOSE REVIEW BOARDS AND COMMITTEES.

22 I THINK TO ME OVER TIME, J.T., IS THE
23 OBSERVATION THAT WE DON'T HAVE THAT MANY PATIENT
24 ADVOCATES ON THE COMMITTEE SO THAT WHEN THERE'S TWO
25 PEOPLE SCORING THIS, IT REALLY DOES WEIGH ONE WAY OR

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1 THE OTHER FOR SOMETHING, WHICH IS WHY I RAISED THE
2 ISSUE WHY DOES ONE SAY THIS IS GREAT AND THE OTHER
3 SAYS IT AIN'T. SO IT'S ALMOST AS THOUGH YOU
4 ACTUALLY NEED A FEW MORE VOTES VIS-A-VIS THE DEI
5 PLAN. THAT'S JUST AN OBSERVATION. OF COURSE, IT'S
6 NOT BECAUSE I WANT MORE WORK AS A PATIENT ADVOCATE,
7 BUT I DO BELIEVE THAT THAT POSSIBLY WEIGHS ON THOSE
8 VOTES AS WELL. AND I'M GLAD TO KNOW THAT TWO
9 PATIENT ADVOCATES CAN HAVE SUCH A GREAT DEAL OF
10 WEIGHT IN THIS AND THAT THE RESEARCHERS ARE
11 LISTENING.

12 IT IS SO CRITICAL FOR INCLUSION AND FOR
13 MOVING THIS RESEARCH INTO OUR COMMUNITIES TO ALLOW
14 OUR COMMUNITIES ALSO TO PARTICIPATE. SO I REALLY
15 APPRECIATE IT, AND I APPRECIATE THE BOARD AS A WHOLE
16 TAKING THIS VERY SERIOUSLY ABOUT THE DEI, ABOUT US
17 MAKING SHIFTS AND CHANGES. AND I'D LIKE YOU TO KNOW
18 FROM MY VANTAGE POINT, WORKING NATIONALLY AND ACROSS
19 OTHER ORGANIZATIONS, BOARDS, CONVERSATIONS WHERE
20 EVERYBODY IS TALKING ABOUT DEI, I LIKE TO POINT TO
21 CIRM AS ONE OF THOSE WHO IS PUTTING THEIR MONEY
22 WHERE OUR INTENTION IS. AND I REALLY, REALLY DO
23 APPRECIATE THAT WE ARE SHOWING AND LEADING, I THINK,
24 THE WAY ON WHAT DEI INCLUSION LOOKS LIKE. SO THANK
25 YOU VERY MUCH.

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1 CHAIRMAN THOMAS: THANK YOU, YSABEL. JUST
2 AS AN ASIDE, THE GRANTS WORKING GROUP HAS SPOTS FOR
3 UP TO SEVEN PATIENT ADVOCATES. AND WE, GENERALLY
4 SPEAKING, HAVE WELL MORE THAN TWO, JUST SO YOU KNOW.
5 BUT, OF COURSE, IF YOU'D LIKE TO BE INVOLVED, FEEL
6 FREE BY ALL MEANS.

7 SO THANK YOU, AL, AND THANK YOU, YSABEL.
8 I THINK IT DOES UNDERSCORE THE SERIOUSNESS WITH
9 WHICH WE COLLECTIVELY APPROACH THE DEI ISSUE AND
10 MARKS A FUNDAMENTAL SHIFT. THIS WAS A BIT OF A
11 WATERSHED APPLICATION ACTUALLY WHERE THIS WAS SUCH
12 AN IMPORTANT FACTOR IN THE DECISION-MAKING. AND SO
13 I THINK THE JUMP FROM A 5.5 TO A 7 IS DEFINITELY AN
14 IMPROVEMENT, WHICH IS EXACTLY WHAT WE WANTED TO SEE.

15 I DON'T WANT TO GET LOST IN THE WASH THAT
16 IT WENT FROM AN 8 TO 7 ON THE SCIENCE TO A 1579,
17 WHICH MEANS THAT THE PROCESS, AGAIN, IS WORKING IN
18 THAT THE GWG, WHEN IT DELIBERATES, GIVES FEEDBACK TO
19 THE APPLICANTS AS TO HOW TO IMPROVE THEIR
20 APPLICATION. AND VERY CLEARLY HERE THAT WAS THE
21 CASE, AND SO WE ENDED UP WITH FOR THE BOARD'S
22 CONSIDERATION A BETTER PROJECT ALL THE WAY AROUND,
23 BOTH SCIENTIFICALLY AND FROM A DEI PERSPECTIVE,
24 WHICH IS EXACTLY WHAT WE WANT.

25 YES, FRED.

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1 DR. FISHER: JUST FOR CONTEXT, I'LL ADD
2 THAT I DON'T THINK I'VE SEEN A PROPOSAL THAT HAS
3 RECEIVED A SCORE OF 10. AND SO I THINK MOST OFTEN
4 THE DEI SCORES FOR PROPOSALS THAT ARE STRONG END UP
5 BEING IN THE 7 TO 8. I DON'T THINK I'VE SEEN
6 CONSENSUS AROUND A 9. THE CURRENT STATE-OF-THE-ART
7 IS 7 IS PROBABLY IN THE 90TH PERCENTILE. THE STAFF
8 CAN CORRECT ME IF I'M WRONG. BUT MY RECOLLECTION,
9 BASED ON THE PROPOSALS THAT I'VE REVIEWED, AND SO
10 GOING FROM A 5 AND A HALF TO A 7 IS A STRONG STEP
11 FORWARD.

12 CHAIRMAN THOMAS: THANK YOU, FRED. YES,
13 CHRIS.

14 DR. MIASKOWSKI: THANK YOU, CHAIRMAN
15 THOMAS. THE OTHER POINT I'D LIKE TO ADD TO THIS
16 CONSIDERATION TO THANK THE STAFF IS THAT IN THEIR
17 APPLICATIONS NOW THE DEI PORTION HAS BEEN
18 CONSOLIDATED. AND BEFORE IT WAS SPRINKLED THROUGH
19 THE APPLICATION, SO WE HAD TO SEARCH FOR THE
20 INFORMATION. AND I THINK FROM THE PERSPECTIVE OF
21 THE NURSE AND PATIENT ADVOCATES, AS WELL AS FROM THE
22 INDIVIDUALS WHO ARE WRITING THE APPLICATION, AS WELL
23 AS THE SCIENTISTS WHO ARE REVIEWING THEM, HAVING
24 THIS INFORMATION IN A CONSOLIDATED SPOT IS REALLY,
25 REALLY HELPFUL.

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1 AND I'VE BEEN DOING A FAIR NUMBER OF THESE
2 REVIEWS, AND I'VE SEEN, I PERCEIVE, AND I'D BE
3 INTERESTED IN OTHER PATIENT ADVOCATES' COMMENTS, A
4 CHANGE IN TONE FROM THE SCIENTIST REVIEWING THE
5 APPLICATION BEING MUCH MORE APPRECIATIVE OF THE DEI
6 CONVERSATION THAT WE HAVE. AND I REALLY THINK THAT
7 MOVE BY THE STAFF TO PUT EVERYTHING IN ONE PLACE HAS
8 ENHANCED ALL OF OUR ABILITIES TO DO A BETTER JOB
9 WITH THIS TOPIC. SO I'D LIKE TO SAY THANK YOU FOR
10 THAT.

11 CHAIRMAN THOMAS: THANK YOU, CHRIS.
12 ANNE-MARIE.

13 DR. DULIEGE: I REALLY WELCOME SOME
14 GUIDANCE HERE. APPRECIATIVE OF WHAT HAS BEEN SAID.
15 I THINK IT'S GREAT TO IMPROVE, BUT WE REALLY SHOULD
16 FIRST JUDGE THE QUALITY THE SCIENCE, THE EXPERTISE
17 OF THE TEAM, AND THE DEI PRIMARILY.

18 SO FROM A QUALITY OF THE SCIENCE AND THE
19 EXPERTISE OF THE TEAM, IS 7 GOOD ENOUGH? I
20 APPRECIATE IT'S THE 90 PERCENTILE, BUT I KNOW THAT
21 WE'VE ALWAYS STRIVED FOR FUNDING ONLY THE VERY BEST
22 PROPOSAL, NOT THE GOOD PROPOSAL. SO IS IT IN THE
23 VERY BEST OR IN THE GOOD?

24 CHAIRMAN THOMAS: ANY OF THE PATIENT
25 ADVOCATE MEMBERS OF THE GWG WISH TO RESPOND TO

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1 ANNE-MARIE'S QUESTION? FRED.

2 DR. FISHER: SO IN GOING THROUGH THE
3 REVIEW PROCESS, I WOULD SAY THAT 90 PLUS PERCENT OF
4 THE DISCUSSION OF THE PROPOSAL IS ON THE SCIENCE.
5 AND IT'S REALLY IMPRESSIVE AS A NONPHYSICIAN,
6 NONSCIENTIST TO LISTEN TO THAT DISCUSSION. AND
7 THOSE OF US PATIENT ADVOCATES THAT ARE ASSIGNED DO
8 OUR BEST TO PROVIDE A DEI AND PATIENT PERSPECTIVE
9 THAT LIVES UP TO THE QUALITY OF THE SCIENTIFIC
10 REVIEW. AND THAT'S NOT EASY.

11 AND PART OF WHAT MAKES IT HARD IS THAT THE
12 APPLICANTS HAVE NOT YET FIGURED OUT WHAT INCLUSION
13 AND ACCESS OF UNDERSERVED POPULATIONS IN RESEARCH
14 REALLY MEANS. AND SO THE WEAKEST PART OF THE
15 PROPOSAL, WHEN A PROPOSAL GETS ALL ONES, THE SCIENCE
16 IS SUPER STRONG. AND I CAN ATTEST TO THAT BASED ON
17 THE IMPRESSION I'M LEFT WITH. BUT THE WORK THAT THE
18 STAFF ARE DOING TO HELP THE APPLICANTS UNDERSTAND
19 WHAT IT MEANS TO INCLUDE UNDERSERVED POPULATIONS,
20 WHETHER IT'S CLINICAL TRIALS OR EARLY STAGE
21 DISCOVERY PROJECTS, IS SOMETHING THAT IT'S CLEAR THE
22 APPLICANTS DON'T REALLY PAY A LOT OF ATTENTION TO
23 BECAUSE THEY'RE SO FOCUSED ON THE SCIENCE. AND WE
24 ARE KIND OF IMPOSING THIS NEW CRITERIA THAT THEY
25 ARE, FRANKLY, REALLY UNFAMILIAR WITH.

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1 AND SO WE CAN TELL THE CHALLENGE THEY HAVE
2 IN RESPONDING TO THE QUESTIONS. AND I THINK THE
3 REVIEWERS HAVE GOTTEN BETTER AT BEING LESS TOLERANT
4 OF THE MEDIOCRE LIP SERVICE KIND OF RESPONSES WE
5 OFTEN SEE. AND I THINK THE STAFF HAVE DONE A GREAT
6 JOB IN TRAINING THE SCIENTISTS WHO ARE DOING THE
7 APPLICATIONS AROUND WHAT IT MEANS, AND THAT PAYING
8 LIP SERVICE IS VERY DIFFERENT THAN HAVING A PLAN.
9 AND THAT'S A COMMON THEME OF OUR REVIEW PROCESS.

10 SO I THINK YOU CAN BE CONFIDENT THAT THE
11 SCIENCE IS GREAT. I THINK WE CAN BE LESS CONFIDENT
12 THAT THE INCLUSION OF UNDERSERVED COMMUNITIES AND
13 HAVING A REAL ROBUST PLAN TO DO THAT THAT GOES
14 BEYOND, WELL, THE CATCHMENT AREA OF THE FACILITY IS
15 IN A VERY DIVERSE COMMUNITY AND, THEREFORE, WE'RE
16 JUST GOING TO ASSUME THAT THEY'RE GOING TO DO IT, OR
17 THEY'RE THIS VERY PRESTIGIOUS INSTITUTION THAT IS IN
18 A DIVERSE COMMUNITY. SO THEY MUST HAVE A REAL PLAN,
19 OR THEY MUST BE ABLE TO ATTRACT PEOPLE FROM
20 UNDERSERVED COMMUNITIES. I THINK WE ARE NO LONGER
21 TAKING THOSE LEAPS OF FAITH AND REALLY HOLDING
22 PEOPLE MORE ACCOUNTABLE TO A REAL PLAN AROUND
23 INCLUSION.

24 SO I DON'T THINK YOU HAVE TO BE CONCERNED
25 THAT WE AREN'T FUNDING THE BEST SCIENCE BECAUSE THE

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1 SCIENTIFIC REVIEWERS THAT ARE COMING IN ARE AMAZING.
2 AND I THINK WE ARE GETTING BETTER AT HOLDING THE
3 APPLICANTS ACCOUNTABLE FOR THEIR DEI PLAN.
4 HOPEFULLY THAT MADE SENSE.

5 CHAIRMAN THOMAS: THANK YOU, FRED. YSABEL
6 AND THEN AL.

7 MS. DURON: THANK YOU, FRED FOR LAYING
8 THAT BASELINE. THAT IS SO CRITICAL, THAT WE DO HOLD
9 RESEARCHERS ACCOUNTABLE. TO SOME EXTENT IT IS NOT
10 THE BEST SCIENCE BECAUSE WITHOUT THE INCLUSION OF
11 COMMUNITIES OF COLOR WHO HAVE BEEN HISTORICALLY
12 UNDERRESEARCHED, IT CAN'T BE THE BEST SCIENCE
13 BECAUSE IT DOES NOT SERVE US ALL. SO I ALWAYS SAY
14 IS IT ETHICAL AND IS IT MORAL AND DOES IT SERVE ALL?
15 SO IS IT JUST, J-U-S-T, JUSTICE SCIENCE? THAT'S
16 WHERE WE ARE TRYING TO GET TO, AND I SO APPRECIATE
17 IT WHEN FOLKS LIKE FRED LAY THAT OUT.

18 AND THERE ARE THOSE OF US WHO HAVE BEEN
19 TALKING ABOUT THIS FOR QUITE A WHILE AND SO
20 APPRECIATE YOUR QUESTIONS, ANNE-MARIE, BECAUSE
21 THEY'RE VERY CRITICAL. AND I'M EXCITED BECAUSE I
22 HAVE BEEN FROM LATINO RESEARCH FRIENDS HEARING THIS
23 THING ABOUT CHECKING THE BOX AND NOT HOLDING
24 RESEARCHERS ACCOUNTABLE. AND THAT'S WHAT I SEE US
25 DOING HERE AT CIRM.

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1 AND I'M SO EXCITED THAT WE HAVE EMBRACED
2 THIS AND THAT, AS FRED SAID AND I THINK AL SAID,
3 FINALLY THE RESEARCHERS ARE STARTING TO GET IT. WE
4 ARE BRINGING THEM TO THE CHURCH, AND I AM REALLY
5 EXCITED. SO, ANNE-MARIE, YES, WE KEEP BUGGING THEM
6 AND WE KEEP ASKING FOR THE PERFECT SCORE. ONCE WE
7 GET THE PERFECT SCORE, I GUESS I CAN GO TO HEAVEN
8 BECAUSE IT'S GOING TO BE AWHILE TILL WE GET THERE.
9 BUT THANK YOU. WE NEED TO KEEP THAT FINGER ON THE
10 WHATEVER WE KEEP THE FINGER ON. THANK YOU VERY
11 MUCH.

12 CHAIRMAN THOMAS: YSABEL. AL.

13 MR. ROWLETT: I'LL TALK MORE SPECIFICALLY
14 ABOUT THE EVOLUTION OF THE PATIENT ADVOCATE AS IT
15 PERTAINS TO MY OWN CONTRIBUTIONS ON THE GWG,
16 ANNE-MARIE. THAT MY SCORING HAS BECOME CERTAINLY
17 MORE CRITICAL AND REFINED.

18 I AGREE WITH FRED, THAT THE SCIENTIFIC
19 REVIEWERS, WHEN THEY SCORE SOMETHING A ONE, IT IS AN
20 AMAZING PROCESS TO BE A PART OF. AND OFTENTIMES, AS
21 A PATIENT ADVOCATE, I DON'T COMPREHEND ALL OF THE
22 INTRICACIES OF THE SCIENCE AND APPRECIATE IT WHEN
23 SCIENTIFIC REVIEWERS PAUSE AND GIVE A VERY DETAILED
24 EXPLANATION. IN THE SAME WAY, AS A PATIENT
25 ADVOCATE, I HAVE MORE EFFECTIVELY DESCRIBED THE

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1 IMPACT ON UNDERSERVED AND UNSERVED COMMUNITIES AND
2 THAT THERE'S NO IMPACT WHEN THEY'RE NOT CONSIDERED
3 OR INCLUDED. AND THAT WHEN WE RECEIVE GRANTS, NO
4 DISRESPECT TO ANY GRANT-MAKING INSTITUTION, THAT ARE
5 PREDOMINANTLY PLATITUDES, I NOW HAVE AN AUDIENCE
6 THAT IS RECEPTIVE TO THAT. AND A WAY TO SAY THAT
7 SHIFTS THE AUDIENCE FROM THINKING, OKAY. IT'S NOT
8 JUST ABOUT THE SCIENCE, BUT IT'S ALSO ABOUT
9 IMPACTING THE SCIENTISTS WHO DEVELOP THE PROPOSALS.
10 AND THEREIN LIES WHY A 7 IS BETTER THAN WHAT WE HAD
11 INITIALLY, AND WE CONTINUE TO MOVE FORWARD IN
12 GETTING BETTER RESPONSES BECAUSE THAT IS ULTIMATELY
13 THE GOAL. WE WANT GRANT APPLICANTS TO GIVE US
14 BETTER RESPONSES.

15 CHAIRMAN THOMAS: THANK YOU, AL.

16 ANNE-MARIE, I WOULD ADD THAT THE WHOLE
17 PROCESS OF INCORPORATING DEI AS A CRUCIAL CRITERIA
18 IS EVOLVING. AND SOMEWHAT FURTHER TO FRED'S
19 COMMENTS, BECAUSE IT'S AN EVOLVING TASK THAT THE
20 RESEARCHERS WHEN THEY'RE PROPOSING ARE INCREASINGLY
21 FACTORING THAT INTO WHAT THEY SUBMIT, AND SO I THINK
22 THAT THE, NO, IT'S NOT A 10, BUT IT IS INDICATIVE OF
23 THE FACT THAT IT IS, AS WE'VE SAID HERE, TAKEN VERY
24 SERIOUSLY, WHICH IS WHY, BY THE WAY, IF YOU RECALL
25 THE DISCUSSION ON THIS THE LAST WHENEVER IT CAME UP,

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1 THE APPLICATION REVIEW SUBCOMMITTEE, GIVEN THE SPLIT
2 ON THE SCIENCE AND THE LOW DEI SCORE, THAT I FELT
3 THAT THIS WAS REALLY A GOOD TEST CASE TO DRIVE HOME
4 THE IMPORTANCE OF GOING BACK TO THE DRAWING BOARD TO
5 ELEVATE THE ATTENTION PAID BOTH IN THAT CASE TO THE
6 SCIENCE AND THE DEI. AND I THINK THAT THIS PROJECT
7 IS ABSOLUTELY THE BETTER FOR THE BOARD'S DECISION TO
8 SEND IT BACK, AND YOU'VE SEEN WHAT THE RESULTS ARE.

9 SO SHORT ANSWER, ANNE-MARIE, THE PROCESS
10 PROCEEDS APACE. IT'S GETTING REFINED AS WE GO
11 ALONG. THE SCORES ARE IMPROVING, AND IT IS NOW VERY
12 CLEARLY A CENTRAL PART OF EVERYBODY'S CONSIDERATION,
13 WHICH IS EXACTLY WHERE WE WANTED TO BE. SO THANK
14 YOU TO ALL.

15 DR. DULIEGE: I JUST WANT TO SAY I REALLY
16 APPRECIATE THAT THE PROCESS IS HELPING AND THAT CIRM
17 TEAM IS DOING SOMETHING GOOD AND IS INFLUENCING THE
18 MATTER.

19 I ALSO APPRECIATE THAT THE DEI TEAM HAS
20 RESULTED IN IMPROVEMENT, BUT ARE NOT YET THERE AND
21 IT WILL TAKE SOME TIME, YSABEL. WE STILL NEED YOU
22 FOR SOME TIME.

23 I WOULD JUST SAY ONE NUANCE HERE WHEN IT'S
24 A SUPER RARE DISEASE LIKE THIS ONE, IT'S OBVIOUSLY
25 MORE DIFFICULT TO COME WITH A PRACTICAL PROPOSAL ON

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1 DEI AS OPPOSED TO DIABETES, EVEN PARKINSON'S, FOR
2 THAT MATTER. SO I GIVE THEM A LITTLE BIT OF AN
3 EXCUSE IN SOME WAYS TO NOT BEING SO CREATIVE. I'VE
4 HEARD THAT THE SCIENCE IS GREAT. I'VE HEARD THAT
5 THE DEI IS, I WOULD SAY, GOOD ENOUGH FOR NOW. I
6 HAVEN'T HEARD IF THE TEAM IS THE BEST TEAM WITH
7 EXPERTISE HERE. AND, GIL, I THINK IF YOU HAD
8 ANYTHING OR ANYONE ON THE TEAM, EXPERTISE OF PEOPLE
9 DOING IT BESIDES THE SCIENCE, THEN I WILL FEEL FULLY
10 COMFORTABLE VOTING YES.

11 DR. SAMBRANO: CERTAINLY. SO THE TEAM IS
12 AND EVEN WHEN IT HAD THE SCORE OF EIGHT TO SEVEN,
13 THAT WAS NEVER A CONCERN. SO THESE ARE PROBABLY ONE
14 OF THE WORLD'S EXPERTS IN LEADING THIS KIND OF
15 EFFORT.

16 THE MAIN CONCERNS, JUST EVERYBODY'S
17 AWARENESS, IN TERMS OF WHAT CAUSED THE SPLIT
18 ORIGINALLY WAS IN THE AMOUNT OF INFORMATION THAT THE
19 APPLICANTS HAVE PROVIDED RELATED TO THE
20 MANUFACTURING PROCESS. SO THEY DIDN'T HAVE A CLEAR
21 UNDERSTANDING OF ALL THE DETAILS SO THAT THEY COULD
22 PROPERLY COMMENT. SO A LOT OF THOSE TWOS WERE ABOUT
23 WE REALLY WANT MORE INFORMATION FROM THE APPLICANTS
24 TO GIVE US MORE CONFIDENCE THAT THEIR MANUFACTURING
25 PROCESS IS GOING TO WORK OUT. SO I THINK THAT WAS

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1 PROBABLY THE OVERRIDING CONCERN WHICH WAS RESOLVED
2 WITH THE REVISION.

3 MR. TORRES: MR. CHAIRMAN, IF I MAY ADD, I
4 FIRST STARTED RAISING THIS --

5 MR. HUANG: ART, YOU'RE CONFLICTED ON THE
6 MOTION.

7 MR. TORRES: OH, MY GOD.

8 MR. HUANG: WE STILL HAVE A MOTION ON THE
9 TABLE.

10 MR. TORRES: I'M SORRY. I WANTED TO TALK
11 ABOUT DEI.

12 CHAIRMAN THOMAS: THANK YOU. LEONDRA, DO
13 YOU HAVE YOUR HAND UP? NO.

14 DR. CLARK-HARVEY: I DO. THANKS. I'VE
15 HAD IT UP FOR A BIT. I JUST WANTED TO CONTRIBUTE
16 AND SUPPORT THE COMMENTS THAT ARE MADE. I THINK WE
17 HAVE TO REMEMBER THAT DEI IS NOT ALWAYS EASY TO
18 MEASURE, RIGHT? SO YOU CAN MEASURE DIVERSITY, THE
19 PRESENCE OF OTHERS, RIGHT? HOW DIVERSE ARE THE
20 FOLKS IN THE ROOM COMES DOWN TO A MORE NUANCED
21 UNDERSTANDING AND APPRECIATION OF HOW CULTURAL
22 COMPETENCE AND INTEGRITY IS REALLY MEASURED. THAT'S
23 HARD.

24 SO FOR ME, IF FOLKS LANDING AROUND THE SIX
25 OR SEVEN, I THINK THAT'S GREAT BECAUSE, HONESTLY, IF

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1 SOMEONE WAS SCORING A 10, IT'D BE A LITTLE SUSPECT.
2 I THINK IT'S REALLY DIFFICULT BECAUSE IT'S SUCH A
3 CONTINUUM OF PROGRESS AND THINKING AND EFFORT. SO I
4 WANT US TO KEEP THAT IN MIND AS WELL, DIFFERENT FROM
5 OTHER THINGS THAT ARE EASILY MEASURED, IS IT THERE
6 OR IS IT NOT, DEI, EQUITY, INCLUSION, I MEAN THE
7 FIELD IS STILL IN MANY WAYS EMERGING IN ITSELF. SO
8 I THINK WE SHOULD GIVE OURSELVES AND OUR APPLICANTS
9 A LITTLE GRACE ON THAT END.

10 CHAIRMAN THOMAS: THANK YOU. OTHER
11 QUESTIONS OR COMMENTS FROM MEMBERS OF THE BOARD? I
12 THINK THIS HAS BEEN A GREAT DISCUSSION ON A MOST
13 IMPORTANT TOPIC. SO THANK YOU, EVERYBODY, FOR YOUR
14 COMMENTS.

15 DO WE HAVE ANY PUBLIC COMMENT ON THIS
16 APPLICATION?

17 MS. BONNEVILLE: NO.

18 CHAIRMAN THOMAS: MARIA, WILL YOU PLEASE
19 CALL THE ROLL.

20 MS. BONNEVILLE: DAN BERNAL. LEONDRA
21 CLARK-HARVEY.

22 MS. CLARK-HARVEY: YES.

23 MS. BONNEVILLE: ANNE-MARIE DULIEGE.

24 DR. DULIEGE: YES.

25 MS. BONNEVILLE: YSABEL DURON.

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1 MS. DURON: YES.
2 MS. BONNEVILLE: MARK FISCHER-COLBRIE.
3 DR. FISCHER-COLBRIE: AYE.
4 MS. BONNEVILLE: FRED FISHER.
5 DR. FISHER: YES.
6 MS. BONNEVILLE: ELENA FLOWERS.
7 DR. FLOWERS: YES.
8 MS. BONNEVILLE: DAVID HIGGINS.
9 DR. HIGGINS: YES.
10 MS. BONNEVILLE: STEVE JUELSGAARD. RICH
11 LAJARA.
12 MR. LAHARA: YES.
13 MS. BONNEVILLE: CHRISTINE MIASKOWSKI.
14 DR. MIASKOWSKI: YES.
15 MS. BONNEVILLE: LAUREN MILLER-ROGEN.
16 MS. MILLER-ROGEN: YES.
17 MS. BONNEVILLE: ADRIANA PADILLA.
18 DR. PADILLA: YES.
19 MS. BONNEVILLE: JOE PANETTA. AL ROWLETT.
20 MR. ROWLETT: AYE.
21 MS. BONNEVILLE: MARVIN SOUTHARD.
22 DR. SOUTHARD: YES.
23 MS. BONNEVILLE: JONATHAN THOMAS.
24 CHAIRMAN THOMAS: YES.
25 MS. BONNEVILLE: THE MOTION CARRIES.

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1 CHAIRMAN THOMAS: THANK YOU VERY MUCH. SO
2 WE ARE GOING TO -- WE HAVE -- BETH, YOU GET THREE
3 MINUTES OFF. WE HAVE THE NEXT ITEM IS GOING TO BE
4 NO. 10 WHEN SENATOR PORTANTINO CALLS IN AT 11
5 O'CLOCK SHARP. SO THERE'S NO POINT IN STARTING ONE
6 OF THE OTHER TOPICS AT THIS POINT. SO IF WE CAN
7 JUST HAVE EVERYBODY TAKE ABOUT A THREE-MINUTE BREAK,
8 AND WE'LL COME BACK HERE WITH SENATOR TORRES AND
9 SENATOR PORTANTINO.

10 AND, ART, PLEASE FEEL FREE WHEN THE
11 SENATOR IS ON THE LINE TO BEGIN THE DISCUSSION ON
12 THAT ITEM NO. 10. THANK YOU.

13 (A RECESS WAS TAKEN AFTER WHICH THE
14 APPLICATION REVIEW SUBCOMMITTEE CONCLUDED ITS
15 BUSINESS AND THE FOLLOWING WAS HEARD BEFORE THE FULL
16 BOARD IN OPEN SESSION.)

17 CHAIRMAN THOMAS: MARIA, ARE WE GOOD TO GO
18 HERE?

19 MS. BONNEVILLE: SURE. YEAH, I THINK SO.

20 MR. TORRES: GREAT. THANK YOU, MR.

21 CHAIRMAN. MR. CHAIRMAN AND MEMBERS OF THE BOARD,
22 I'M HONORED TO INTRODUCE TO YOU A VERY DEAR FRIEND
23 WHOSE CAREER I HAVE FOLLOWED THROUGHOUT HIS TENURE
24 IN THE ASSEMBLY AND IN THE STATE SENATE. ANTHONY
25 PORTANTINO REPRESENTS A LOT OF THE AREAS WHERE WE

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1 PROVIDE FUNDING, CALTECH, JPL, AS WELL AS WARNER
2 BROTHERS AND DISNEY. WE DON'T PROVIDE FUNDING
3 THERE, BUT WE CERTAINLY SUPPORT THEIR EFFORTS, AND
4 THE CLAREMONT COLLEGES, OF COURSE, AND CALTECH.

5 WHAT'S ALSO IMPORTANT ABOUT SENATOR
6 PORTANTINO IS HIS UNWAVERING LEADERSHIP ON GUN
7 CONTROL AND RAISING THE AGE OF WHEN YOU CAN BUY A
8 RIFLE OR A GUN, MAKING SURE THAT GUN VIOLENCE, WAS
9 SIGNED IN A BILL BY SENATOR PORTANTINO BY GAVIN
10 NEWSOM JUST A FEW DAYS AGO, JULY 22D, TO PROVIDE FOR
11 MUCH MORE PROTECTIONS FOR US LIVING IN A SOCIETY
12 FILLED WITH GUN VIOLENCE. BUT ALSO HIS TREMENDOUS
13 LEADERSHIP IN MENTAL HEALTH ISSUES, SOME OF WHICH I
14 WORKED WITH HIM ON YEARS AGO, BUT ALSO NOW EVEN MORE
15 THE LEADERSHIP HE'S SHOWN ON THAT, PLUS THE ABILITY
16 TO RAISE ISSUES RELATED TO CANCER AND CLEARLY WHICH
17 BRINGS US TO THIS POINT, WHICH IS I WANTED HIM TO BE
18 PRESENT TO PRESENT HIS BILL, SB 987, WHICH I
19 TRANSFERRED AND SENT TO EACH OF THE BOARD MEMBERS
20 PRIOR TO TODAY'S MEETING IN HOPES THAT WE CAN PASS A
21 MOTION I WILL MAKE AFTER SENATOR PORTANTINO'S
22 PRESENTATION TO HOPEFULLY ENDORSE THIS LEGISLATION
23 WHICH IS SO IMPORTANT ALSO TO THE WORKING GROUP OF
24 OUR AFFORDABILITY AND ACCESSIBILITY ISSUES AND,
25 QUITE FRANKLY, THE OFFICE OF AFFORDABILITY, WHICH

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1 THE GOVERNOR IS PROPOSING AND PROPOSED IN THE BUDGET
2 AND WILL TAKE EFFECT JANUARY 1, 2023.

3 SO, SENATOR, THANK YOU FOR JOINING US.
4 IT'S A PLEASURE TO SEE YOU.

5 SENATOR PORTANTINO: IT'S A PLEASURE TO
6 SEE MY OLD FRIEND. BEFORE I GO TO BUSINESS, I HAD
7 DINNER WITH ONE OF YOUR OLD STAFFERS, DANA HOBART,
8 THE OTHER NIGHT, AND HE WANTED TO SAY HELLO AND SEND
9 HIS REGARDS TO YOU.

10 MR. TORRES: THANK YOU.

11 SENATOR PORTANTINO: ABSOLUTELY. AND I'M
12 A BIG FAN OF SENATOR TORRES. HE REPRESENTED A BIG
13 CHUNK OF WHERE I REPRESENT NOW AND BEEN A GOOD
14 FRIEND AND MENTOR AND HAPPY TO BE HERE AND SEE ALL
15 THE GOOD WORK THAT YOU'RE ALL DOING. AND LEONDRA, MY
16 BUDDY, IS HERE TOO. WE PARTNER ON A LOT OF MENTAL
17 HEALTH STUFF, AND SO IT'S GOOD TO SEE YOU. AND
18 OBVIOUSLY TARA MCGEE, MY LEGISLATIVE DIRECTOR, IS ON
19 THE CALL WITH US. AND I GET ALL THE CREDIT AND GET
20 THE MICROPHONE, SO IT'S A GOOD --

21 MR. TORRES: ALSO, I FORGOT TO THANK YOU
22 FOR THE WORK YOU DID WITH THE GORDON MOORE
23 FOUNDATION AND I DID WITH OUR PREVIOUS VICE CHAIR TO
24 ESTABLISH AND BRING IN SCIENTISTS INTO THE
25 LEGISLATURE THROUGH THE GORDON MOORE FOUNDATION AND

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1 OTHER FUNDING SO THAT THESE SCIENCE FELLOWS ARE MUCH
2 A PART OF YOUR LEGACY AS WELL. SO WE ACTUALLY HAVE
3 SCIENTISTS IN THE ROOM BEING ABLE TO ANSWER THE
4 QUESTIONS OF LEGISLATORS AS THEY REVIEW LEGISLATION.

5 SENATOR PORTANTINO: ABSOLUTELY. I HAVE A
6 NEUROSCIENTIST IN MY OFFICE, ONE OF THE FELLOWS THIS
7 YEAR, PH.D. IN NEUROSCIENCE, AND SHE'S DOING GREAT
8 WORK AND LOVING BEING A POLICY PERSON. SO IT'S BEEN
9 A GREAT ADDITION TO THE DISCOURSE IN THE CAPITOL.

10 OBVIOUSLY YOU ALL KNOW WE'VE GOT MAJOR
11 CHALLENGES IN HEALTHCARE. THE PANDEMIC HIGHLIGHTED
12 THINGS WE ALL KNEW. THERE WERE MAJOR DISPARITIES IN
13 ACCESS TO CARE AND, IN PARTICULAR, ACCESS TO THE TOP
14 CANCER CLINICAL TRIALS, RESEARCH HOSPITALS, CENTERS
15 OF EXCELLENCE. BY THE WAY, I PUT MY CITY OF HOPE
16 BACKGROUND BEHIND ME. OBVIOUSLY GOT TO SHOW MY
17 COLORS FOR THE DISTRICT THAT I REPRESENT. I HAD THE
18 ROSE BOWL, AND AT THE LAST MINUTE I SAID LET ME
19 SWITCH IT TO CITY OF HOPE.

20 AND SO WHEN I WAS ASKED -- LAST YEAR WE
21 DID THE CANCER PATIENTS BILL OF RIGHTS. SENATOR
22 RUBIO CARRIED THAT RESOLUTION, WHICH SORT OF SET THE
23 FRAMEWORK FOR WANTING TO MAKE SURE THAT CANCER
24 PATIENTS FROM ACROSS CALIFORNIA, FROM ACROSS
25 SOCIOECONOMIC STRATA HAVE A BILL OF RIGHTS. AND SO

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1 THIS YEAR WE'RE GOING TO TAKE THAT CONCEPT AND PUT
2 IT INTO PRACTICE AND ALLOW MEDI-CAL PATIENTS ACCESS
3 TO THE BEST CARE IN THE STATE OF CALIFORNIA. AND SO
4 THAT'S ESSENTIALLY WHAT 987 DOES.

5 THE HEALTHPLANS HAVE REMOVED THEIR
6 OPPOSITION. THE BIGGEST CHANGE, I THINK, IS THEY
7 CAN NO LONGER SELF-REFER. THERE HAS TO BE A
8 REFERRAL, BUT THE ACCESS PIECE IS THE HEART AND SOUL
9 OF THE BILL, AND WE WANT TO MAKE SURE -- AND, AGAIN,
10 IF ANY OF US HAVE A LOVED ONE THAT HAS CANCER, YOU
11 DON'T WANT SOMEBODY TO SAY, OH, NO. YOU CAN'T GO TO
12 THAT HOSPITAL, OR, NO, YOU CAN'T HAVE ACCESS TO THAT
13 TREATMENT BASED ON OTHER FACTORS. AND SO WE WANT
14 EVERYONE TO HAVE ACCESS TO THE BEST CARE AVAILABLE
15 IN THEIR REGION. AND AT THE HEART OF THE BILL,
16 THAT'S WHAT IT DOES.

17 AND SO OBVIOUSLY ALL OF THE WORK AND
18 FUNDING AND RESEARCH THAT YOU ALL MAKE HAPPEN TURNS
19 INTO THESE TRIALS AND TREATMENT. AND SO WE WANT TO
20 MAKE SURE THAT YOUR GOOD WORK GETS IN THE RIGHT
21 PATIENT'S AGENDA SO WE CAN CURE AND SAVE MORE LIVES
22 BECAUSE IT DOESN'T MAKE ANY SENSE TO BE FUNDING AND
23 SUPPORTING ALL OF THIS RESEARCH, BUT SAY ONLY A
24 SEGMENT OF CALIFORNIANS HAVE ACCESS TO IT. THAT'S
25 WHAT WE ARE DOING.

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1 MR. TORRES: THAT'S VERY WELL PUT. IN
2 FACT, THAT WAS THE PREVIOUS DISCUSSION WE WERE
3 HAVING IN TERMS OF REACHING OUT TO UNDERSERVED
4 COMMUNITIES LED BY MANY OF OUR PATIENT ADVOCATES ON
5 THE BOARD.

6 ARE THERE ANY QUESTIONS FROM MEMBERS OF
7 THE BOARD? I WOULD LIKE -- IF NOT, I WOULD MOVE
8 THAT WE SUPPORT SB 987 AND ITS PASSAGE THROUGH THE
9 LEGISLATURE. I KNOW THAT ONCE THE GOVERNOR RECEIVES
10 IT, HE'LL SIGN IT.

11 DR. SOUTHARD: SO MOVED.

12 MR. ROWLETT: SECOND.

13 CHAIRMAN THOMAS: OKAY. ART, YOU WANT ME
14 TO TAKE THIS FROM HERE?

15 MR. TORRES: YES, PLEASE.

16 CHAIRMAN THOMAS: SENATOR, THANK YOU VERY
17 MUCH FOR YOUR HARD WORK AND DEDICATION AND FOR
18 JOINING US HERE TODAY ON THIS MOST IMPORTANT MATTER.

19 QUESTIONS, COMMENTS FROM MEMBERS OF THE
20 BOARD? YSABEL.

21 MS. DURON: SORRY I DIDN'T RAISE MY HAND
22 FAST ENOUGH, BUT I DID WANT TO SAY THAT THE LATINO
23 CANCER INSTITUTE HAS BEEN ONE OF THE SUPPORTERS OF
24 SB 987, AND WE'RE PARTICULARLY -- WE'RE COMPLETELY
25 GLAD THAT THE SENATOR LOOKED AT THE MEDI-CAL PATIENT

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1 POPULATION BECAUSE THESE ARE OFTENTIMES THE FOLKS
2 WITH THE LEAST ACCESS, THE LATE DETECTION AND,
3 THEREFORE, THE DISPROPORTIONATE MORTALITY RATE
4 BECAUSE THEY DON'T HAVE ACCESS TO THESE QUALITY CARE
5 AND ADVANCED SCIENCE.

6 SO I'M REALLY EXCITED THAT WE ARE GIVING
7 THEM THROUGH SB 987 THE OPPORTUNITY TO ACCESS
8 COMPREHENSIVE CANCER CENTERS FOR SOME OF THE MORE
9 ADVANCED KINDS OF DIAGNOSTICS AND CARE. SO MY
10 AGENCY HAS SUPPORTED THIS. I DON'T KNOW IF THAT
11 CAUSES CONFLICT FOR ME WITH CIRM OR SUPPORTING CIRM
12 TO DO THIS, BUT I JUST WANTED TO PUT THAT OUT THERE
13 VERY CLEARLY.

14 CHAIRMAN THOMAS: IT DOES NOT INVOLVE ANY
15 FUNDING, SO YOU'RE IN GOOD SHAPE, YSABEL. THANK
16 YOU.

17 LEONDRA.

18 DR. CLARK-HARVEY: I JUST ALSO CALL OUT
19 THAT THIS IS SO IMPORTANT, NOT JUST FOR PHYSICAL
20 HEALTH, BUT ALSO FOR BEHAVIORAL HEALTH TOO. THERE'S
21 OFTEN, WHEN YOU LOOK AT THE RELATIONSHIP OF FOLKS
22 THAT ARE ON MEDI-CAL ENROLLEES FOR BEHAVIORAL HEALTH
23 ALSO ARE SUBJECT TO THESE PHYSICAL HEALTH DISORDERS.
24 I THINK THIS IS A NICE WAY TO REALLY ADDRESS THE
25 OVERLAP THERE. AND REALLY I THINK IT'S A GREAT

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1 EQUITY BILL AS WELL. SO THANK YOU.

2 CHAIRMAN THOMAS: THANK YOU. ANY OTHER
3 COMMENTS FROM MEMBERS OF THE BOARD? ANY COMMENTS
4 FROM MEMBERS OF THE PUBLIC? MARIA?

5 MS. BONNEVILLE: I DO NOT SEE ANY.

6 CHAIRMAN THOMAS: OKAY. MARIA, WILL YOU
7 PLEASE CALL THE ROLL.

8 MS. BONNEVILLE: HAIFAA ABDULHAQ.

9 DR. ABDULHAQ: YES.

10 MS. BONNEVILLE: MOHAMMED ABOUSALEM.

11 DR. ABOUSALEM: YES.

12 MS. BONNEVILLE: KIM BARRETT.

13 DR. BARRETT: YES.

14 MS. BONNEVILLE: GEORGE BLUMENTHAL.

15 DR. BLUMENTHAL: YES.

16 MS. BONNEVILLE: MICHAEL BOTCHAN.

17 DR. BOTCHAN: YES.

18 MS. BONNEVILLE: LINDA BOXER.

19 DR. BOXER: YES.

20 MS. BONNEVILLE: LEONDRA CLARK-HARVEY.

21 DR. CLARK-HARVEY: YES.

22 MS. BONNEVILLE: ANNE-MARIE DULIEGE.

23 DR. DULIEGE: YES.

24 MS. BONNEVILLE: YSABEL DURON.

25 MS. DURON: YES.

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1 MS. BONNEVILLE: MARK FISCHER-COLBRIE.
2 DR. FISCHER-COLBRIE: YES.
3 MS. BONNEVILLE: FRED FISHER. FRED, I
4 THINK YOU JUST JOINED AGAIN. YOU MIGHT BE ON MUTE.
5 I WILL COME BACK TO YOU.
6 ELENA FLOWERS.
7 DR. FLOWERS: YES.
8 MS. BONNEVILLE: JUDY GASSON.
9 DR. GASSON: YES.
10 MS. BONNEVILLE: LARRY GOLDSTEIN.
11 DR. GOLDSTEIN: YES.
12 MS. BONNEVILLE: DAVID HIGGINS.
13 DR. HIGGINS: YES.
14 MS. BONNEVILLE: STEPHEN JUELSGAARD. RICH
15 LAJARA.
16 MR. LAJARA: YES.
17 MS. BONNEVILLE: PAT LEVITT.
18 DR. LEVITT: YES.
19 MS. BONNEVILLE: DAVID LO.
20 DR. LO: YES.
21 MS. BONNEVILLE: LINDA MALKAS. SHLOMO
22 MELMED.
23 DR. MELMED: YES.
24 MS. BONNEVILLE: CHRISTINE MIASKOWSKI.
25 DR. MIASKOWSKI: YES.

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1 MS. BONNEVILLE: LINDA.
2 DR. MALKAS: YES.
3 MR. TORRES: THANK GOD THE CITY OF HOPE
4 PERSON.
5 MS. BONNEVILLE: LAUREN MILLER-ROGEN.
6 MS. MILLER-ROGEN: YES.
7 MS. BONNEVILLE: ADRIANA PADILLA.
8 DR. PADILLA: YES.
9 MS. BONNEVILLE: AL ROWLETT.
10 MR. ROWLETT: YES.
11 MS. BONNEVILLE: BARRY SELICK.
12 DR. SELICK: YES.
13 MS. BONNEVILLE: MARVIN SOUTHARD.
14 DR. SOUTHARD: YES.
15 MS. BONNEVILLE: MICHAEL STAMOS.
16 DR. STAMOS: YES.
17 MS. BONNEVILLE: JONATHAN THOMAS.
18 CHAIRMAN THOMAS: YES. AND MY DOG SAID
19 YES AS WELL.
20 MS. BONNEVILLE: ART TORRES.
21 MR. TORRES: AYE.
22 MS. BONNEVILLE: KRISTINA VUORI.
23 DR. VUORI: YES.
24 MS. BONNEVILLE: THE MOTION CARRIES.
25 CHAIRMAN THOMAS: THANK YOU BOTH SENATORS

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1 VERY MUCH FOR THIS MATTER. AND BEST OF LUCK TO IT
2 AS IT CONTINUES ALONG IN THE LEGISLATIVE PROCESS.

3 MR. TORRES: THANK YOU SO MUCH FOR YOUR
4 LEADERSHIP, ANTHONY.

5 SENATOR PORTANTINO: IF I COULD HAVE 30
6 SECONDS MORE REAL QUICK, IS THAT OKAY?

7 CHAIRMAN THOMAS: YES, SIR.

8 SENATOR PORTANTINO: I JUST WANT TO SAY I
9 SAW UC DAVIS ON THE LINE TOO. AND OBVIOUSLY WE ARE
10 EXTENDING THE UMBILICAL CORD BLOOD COLLECTION
11 PROGRAM THAT WAS IN THE BUDGET THIS YEAR. SO WE'RE
12 GOING TO CONTINUE TO COLLECT AND STORE UMBILICAL
13 CORD BLOOD. AND OBVIOUSLY THERE'S A BIG HEALTH
14 DISPARITY WHO HAS ACCESS. SO THAT'S ALSO IMPORTANT.

15 AND THEN WE ALSO HAVE A BILL ON FOLLOW-UP
16 MAMMOGRAMS AND IMAGING. YOU SHOULD LOOK AT THAT
17 BECAUSE THE INITIAL MAMMOGRAM IS COVERED BY
18 INSURANCE; BUT IF YOUR DOCTOR SEES AN ABNORMALITY,
19 THE FOLLOW-UP IMAGING IS NOT COVERED BY INSURANCE.
20 AND THERE'S A TREMENDOUS NUMBER OF WOMEN WHO CAN'T
21 AFFORD THE \$800 TO GET THE FOLLOW-UP IMAGING AND
22 FOREGO IT AND THEN END UP WITH BREAST CANCER AND
23 HAVE BAD THINGS HAPPEN. SO WE'RE ASKING INSURANCE
24 COMPANIES TO COVER THE FOLLOW-UP IMAGING COST, NOT
25 JUST THE INITIAL MAMMOGRAM. SO THAT'S VERY

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1 IMPORTANT.

2 JUST WANTED TO RAISE THOSE TWO THINGS.
3 THAT'S SB 974. SO LOOK AT THAT AS WELL BECAUSE WE
4 SHOULDN'T HAVE WOMEN SAY I'M NOT GOING TO GET A
5 FOLLOW-UP IMAGE THAT THEIR DOCTOR WANTS THEM TO GET
6 BECAUSE THEY CAN'T AFFORD IT.

7 MR. TORRES: GOOD FOR YOU.

8 CHAIRMAN THOMAS: THANK YOU VERY MUCH.

9 SENATOR PORTANTINO: THANK YOU VERY MUCH
10 FOR THE TIME. AND, ART, ALWAYS GOOD TO SEE YOU.

11 CHAIRMAN THOMAS: THANK YOU, SENATOR.

12 WE'RE GOING TO GO BACK NOW TO ITEM 7 ON
13 THE AGENDA, CONSIDERATION OF AMENDMENTS TO CLIN2
14 FUNDING OPPORTUNITIES FOR CLINICAL TRIAL STAGE
15 PROJECTS CONCEPT PLAN. DR. CREASEY WILL BE
16 PRESENTING. ABLA.

17 DR. CREASEY: ONE SECOND PLEASE. THANK
18 YOU, CHAIRMAN THOMAS. SO I'M PRESENTING THE
19 PROPOSED REVISION TO CLIN2 CONCEPT. THERAPEUTIC
20 CANDIDATES ELIGIBLE FOR CLINICAL TRIAL AWARDS
21 CURRENTLY INCLUDE THE CLIN2 PROGRAM, ALLOWS CLINICAL
22 TRIAL STUDIES WITH A CANDIDATE THAT IS EITHER A STEM
23 CELL THERAPY OR A GENETIC THERAPY FOR PHASE 1, 2, OR
24 3 TRIALS. SMALL MOLECULE OR BIOLOGICS INVOLVING
25 STEM CELLS, ONLY PHASE 1 TRIALS.

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1 THERAPEUTIC CANDIDATES ELIGIBLE FOR
2 CLINICAL TRIAL AWARDS, WE PROPOSE UNIFYING
3 ELIGIBILITY TO ALLOW ALL THREE CATEGORIES TO QUALIFY
4 FOR A PHASE 1, 2, OR 3 CLINICAL TRIAL. THAT IS,
5 STEM CELL THERAPY, GENETIC THERAPY, AND SMALL
6 MOLECULE OR BIOLOGIC INVOLVING STEM CELLS MAY APPLY
7 FOR PHASE 1, 2, OR 3 TRIALS. THAT ALLOWS FOR
8 CONSISTENT ELIGIBILITY REQUIREMENT ACROSS ALL
9 CLINICAL APPLICATIONS AND PROVIDES THE POSSIBILITY
10 OF ONGOING CIRM SUPPORT FOR SMALL MOLECULE/BIOLOGIC
11 PROJECTS THAT ARE READY TO ADVANCE TO LATE STAGE
12 CLINICAL TRIALS.

13 EXISTING ELIGIBILITY LANGUAGE WOULD BE
14 EXTENDED TO PHASE 2 AND PHASE 3 CLINICAL TRIALS.
15 THE WORDS ARE A SMALL MOLECULE OR BIOLOGIC THAT ACTS
16 ON OR IS DEPENDENT ON ENDOGENOUS HUMAN STEM CELLS
17 FOR ITS THERAPEUTIC EFFECT, THAT IS DEPENDENT ON
18 TARGETING HUMAN CANCER STEM CELLS FOR ITS
19 THERAPEUTIC EFFECT, THAT MODIFIES A STEM CELL
20 THERAPY, OR WHERE A HUMAN STEM CELL IS NECESSARY TO
21 MANUFACTURE THE THERAPY, SUCH AS EXTRACELLULAR
22 VESICLES.

23 ADDITIONAL MINOR REVISIONS. A FEW
24 ADDITIONAL EDITS HAVE BEEN INCLUDED IN THE CONCEPT
25 DOCUMENT THAT REPRESENT A CLARIFICATION IN THE TEXT.

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1 SO GENE THERAPY TO GENETIC THERAPY. THERE ARE A FEW
2 INSTANCES WHERE THIS UPDATE WAS MISSED IN THE LAST
3 ROUND OF CHANGES TO ALIGN WITH THE ADOPTED
4 DEFINITION OF GENETIC THERAPY. CLARIFICATION, THAT
5 FEASIBILITY TRIALS FOR MEDICAL DEVICES ARE INCLUDED
6 WITHIN THE REQUIREMENTS FOR AWARD AMOUNT LIMITS AND
7 CO-FUNDING AMOUNTS.

8 CIRM REQUESTS APPROVAL OF THE PROPOSED
9 AMENDMENTS TO THE CLIN2 CONCEPT PLAN. THANK YOU.

10 CHAIRMAN THOMAS: THANK YOU, ABLA. DO WE
11 HAVE A MOTION TO APPROVE?

12 DR. DULIEGE: I MOVE.

13 CHAIRMAN THOMAS: MOVED BY ANNE-MARIE.
14 SECOND?

15 DR. ABDULHAQ: SECOND.

16 CHAIRMAN THOMAS: SECOND BY HAIFAA. THANK
17 YOU. QUESTIONS OR COMMENTS FROM MEMBERS OF THE
18 BOARD? LOOKS LIKE -- WHO'S FIRST HERE?

19 MS. BONNEVILLE: KIM HAS HER HAND RAISED
20 AS DOES GEORGE.

21 CHAIRMAN THOMAS: KIM AND THEN GEORGE.

22 DR. BARRETT: ABLA, THANK YOU FOR THIS
23 PROPOSAL, AND I AGREE THAT IT WILL MAKE THINGS MORE
24 STRAIGHTFORWARD AND UNIFIED. BUT I WOULD LIKE TO
25 HAVE AN UNDERSTANDING OF WHY THE SMALL MOLECULES AND

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1 BIOLOGICS WERE RESTRICTED TO ONLY PHASE 1 IN THE
2 ORIGINAL CONCEPT PLAN. WHAT WAS THE RATIONALE FOR
3 THAT?

4 DR. CREASEY: WE HAD A COUPLE OF REASONS.
5 ONE, AT LEAST SINCE THE START OF CIRM, IS THAT IN
6 GENERAL WHEN A SUCCESSFUL SMALL MOLECULE OR BIOLOGIC
7 FINISHES A SUCCESSFUL PHASE 1, MOST OF THE TIME
8 INDUSTRY LIKES TO PARTNER WITH THEM, AND THEY HAVE
9 OTHER OPPORTUNITIES FOR FUNDING.

10 BUT THE SECOND REASON IS DURING THE TENURE
11 OF PROPOSITION 71, WE HAD LIMITED RESOURCES TO EVEN
12 THINK ABOUT THAT. AND WE BASICALLY FOCUSED ON CELL
13 AND GENE THERAPY FOR PHASE 1 AND PHASE 2 AND 3 FOR
14 STEM CELLS, BIOLOGICS, AND GENETIC THERAPY. I'M
15 SORRY. GENETIC THERAPY AND CELL THERAPY.

16 DR. BARRETT: SO NOW IT'S FELT THAT
17 RESOURCES ARE SUCH THAT THAT RESTRICTION IS NO
18 LONGER NEEDED?

19 DR. CREASEY: CORRECT FROM A RESOURCES
20 POINT, BUT THE ENVIRONMENT ALSO CHANGES. THERE IS
21 NOW A CONVERGENCE ABOUT SUCH MOLECULES, ESPECIALLY,
22 REMEMBER, WE ARE KEEPING THE REQUIREMENT THAT THE
23 SMALL MOLECULE AND THE BIOLOGIC HAVE TO BE TARGETING
24 A STEM CELL OR INVOLVED WITH A STEM CELL MECHANISM
25 OF ACTION. SO IT'S STILL CONSISTENT WITH OUR

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1 MISSION, AND THAT ALLOWS US TO ALSO -- THERE'S A
2 CONVERGENCE OF THAT EFFORT REGARDING CONDITIONING.
3 AND SOME OF THOSE PROGRAMS LIKELY ARE MOVING AT A
4 PACE WHERE THEY NEED ASSISTANCE ESPECIALLY WITH THE
5 SITUATION WITH ADVANCING THE WHOLE AREA OF
6 BIOTECHNOLOGY HAVING A DOWNTURN. SO WE THOUGHT THAT
7 THIS WOULD BE THE RIGHT PLACE FOR CIRM TO DERISK
8 THESE PROGRAMS AND BRING THEM IN AND ADVANCE THEM
9 THE SAME AS THE CELL AND GENETIC THERAPY.

10 DR. BARRETT: THANK YOU. I WANT TO
11 CLARIFY THAT I'M NOT IN ANY WAY OPPOSED TO THE IDEA.
12 I WAS JUST TRYING TO UNDERSTAND THE BASIS.

13 DR. CREASEY: NO PROBLEM. THANK YOU.

14 CHAIRMAN THOMAS: THANK YOU, KIM.
15 GEORGE.

16 DR. BLUMENTHAL: ACTUALLY KIM JUST ASKED
17 MY QUESTION, SO I'M LOWERING MY HAND.

18 CHAIRMAN THOMAS: OKAY. THANK YOU. OTHER
19 QUESTIONS OR COMMENTS FROM MEMBERS OF THE BOARD?
20 ANY COMMENTS FROM MEMBERS OF THE PUBLIC?

21 MS. BONNEVILLE: THERE ARE NO HANDS
22 RAISED.

23 CHAIRMAN THOMAS: THANK YOU. MARIA, WILL
24 YOU PLEASE CALL THE ROLL.

25 MS. BONNEVILLE: HAIFAA ABDULHAQ.

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1 DR. ABDULHAQ: YES.
2 MS. BONNEVILLE: MOHAMMED ABOUSALEM.
3 DR. ABOUSALEM: YES.
4 MS. BONNEVILLE: KIM BARRETT.
5 DR. BARRETT: AYE.
6 MS. BONNEVILLE: GEORGE BLUMENTHAL.
7 DR. BLUMENTHAL: YES.
8 MS. BONNEVILLE: MICHAEL BOTCHAN.
9 DR. BOTCHAN: YES.
10 MS. BONNEVILLE: LINDA BOXER.
11 DR. BOXER: YES.
12 MS. BONNEVILLE: LEONDRA CLARK-HARVEY.
13 DR. CLARK-HARVEY: YES.
14 MS. BONNEVILLE: ANNE-MARIE DULIEGE.
15 DR. DULIEGE: YES.
16 MS. BONNEVILLE: YSABEL DURON.
17 MS. DURON: YES.
18 MS. BONNEVILLE: MARK FISCHER-COLBRIE.
19 DR. FISCHER-COLBRIE: YES.
20 MS. BONNEVILLE: FRED FISHER. ELENA
21 FLOWERS.
22 DR. FLOWERS: YES.
23 MS. BONNEVILLE: JUDY GASSON.
24 DR. GASSON: YES.
25 MS. BONNEVILLE: LARRY GOLDSTEIN.

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1 DR. GOLDSTEIN: YES.
2 MS. BONNEVILLE: DAVID HIGGINS.
3 DR. HIGGINS: YES.
4 MS. BONNEVILLE: RICH LAJARA.
5 MR. LAJARA: YES.
6 MS. BONNEVILLE: PAT LEVITT.
7 DR. LEVITT: YES.
8 MS. BONNEVILLE: DAVID LO.
9 DR. LO: YES.
10 MS. BONNEVILLE: LINDA MALKAS.
11 DR. MALKAS: YES.
12 MS. BONNEVILLE: SHLOMO MELMED.
13 DR. MELMED: YES.
14 MS. BONNEVILLE: CHRISTINE MIASKOWSKI.
15 DR. MIASKOWSKI: YES.
16 MS. BONNEVILLE: LAUREN MILLER-ROGEN.
17 MS. MILLER-ROGEN: YES.
18 MS. BONNEVILLE: ADRIANA PADILLA.
19 DR. PADILLA: YES.
20 MS. BONNEVILLE: AL ROWLETT.
21 MR. ROWLETT: AYE.
22 MS. BONNEVILLE: BARRY SELICK.
23 DR. SELICK: YES.
24 MS. BONNEVILLE: MARVIN SOUTHARD.
25 DR. SOUTHARD: YES.

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1 MS. BONNEVILLE: MICHAEL STAMOS.

2 DR. STAMOS: YES.

3 MS. BONNEVILLE: JONATHAN THOMAS.

4 CHAIRMAN THOMAS: YES.

5 MS. BONNEVILLE: ART TORRES.

6 MR. TORRES: AYE.

7 MS. BONNEVILLE: KRISTINA VUORI.

8 DR. VUORI: YES.

9 MS. BONNEVILLE: THE MOTION CARRIES.

10 CHAIRMAN THOMAS: THANK YOU, MARIA.

11 ON TO ITEM NO. 8. AND THANK YOU, ABLA,
12 FOR THAT PRESENTATION. ITEM NO. 8 IS CONSIDERATION
13 OF CALIFORNIA CELL AND GENE THERAPY MANUFACTURING
14 NETWORK CONCEPT PLAN. WE WILL HEAR FROM DR. PATEL.
15 SHYAM.

16 DR. PATEL: THANK YOU, CHAIRMAN THOMAS. I
17 HOPE YOU CAN HEAR ME OKAY. I'M GOING TO SHARE MY
18 SLIDES.

19 SO THANK YOU TO THE BOARD FOR GIVING ME
20 THIS OPPORTUNITY TO PRESENT THIS MANUFACTURING
21 NETWORK CONCEPT PLAN. I ALSO WANT TO THANK APPLE
22 AND ZOOM FOR LETTING MY SCREEN SHARE WORK TODAY. SO
23 WE'RE OFF TO A GOOD START ALREADY.

24 SO MY PRESENTATION IS GOING TO WALK US
25 THROUGH CONCEPT PLAN PROPOSAL. THERE ARE A LARGE

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1 NUMBER OF SLIDES SO BEAR WITH ME AS WELL AS THERE'S
2 SOME ANIMATION INVOLVED. SO HOPEFULLY IT ALL WORKS.

3 OKAY. STARTING WITH THE MISSION
4 STATEMENT, OUR MISSION IS TO ACCELERATE WORLD-CLASS
5 SCIENCE TO DELIVER TRANSFORMATIVE REGENERATIVE
6 MEDICINE TREATMENTS IN AN EQUITABLE MANNER TO A
7 DIVERSE CALIFORNIA AND WORLD. SO THIS WAS APPROVED
8 BY THE BOARD LATE LAST YEAR. IN ADDITION TO
9 APPROVING THE NEW MISSION STATEMENT, THE BOARD ALSO
10 APPROVED THE NEW STRATEGIC PLAN THAT MARIA
11 HIGHLIGHTED EARLIER THIS AFTERNOON. AND IN THERE
12 THERE WERE THREE THEMES. AND THIS PARTICULAR
13 CONCEPT PLAN DIRECTLY ADDRESSES ONE OBJECTIVE WITHIN
14 REAL-WORLD SOLUTIONS THEME, WHICH IS CREATING A
15 MANUFACTURING PARTNERSHIP NETWORK. IT ALSO TOUCHES
16 ON A COUPLE OF OBJECTIVES OF THE OTHER TWO THEMES.
17 SO SPECIFICALLY THE DEVELOPING COMPETENCY HUBS OF
18 THE WORLD-CLASS SCIENCE THEME, AS WELL AS TO BUILD A
19 DIVERSE WORKFORCE IN THE STATE OF CALIFORNIA FOR THE
20 PROVIDE OPPORTUNITY FOR ALL THEME. AND I'LL WALK
21 THROUGH HOW IT DOES THAT IN THE NEXT FEW SLIDES.

22 AS YOU KNOW, CELL AND GENE THERAPIES HAVE
23 BEEN RAPIDLY ADVANCING TO THE CLINIC, AND MANY OF
24 THEM HAVE ACCELERATED APPROVAL PATHWAYS TO GET TO
25 APPROVAL. AND THAT CREATES PRESSURE ON THE

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1 MANUFACTURING DEVELOPMENT, WHICH OFTEN IN SOME
2 INSTANCES LAG BEHIND THE CLINICAL DEVELOPMENT OF
3 THESE THERAPIES. IN FACT, THERE HAVE BEEN VARIOUS
4 PROMINENT EXAMPLES OF CELL AND GENE THERAPY
5 APPROVALS THAT HAVE BEEN STALLED DUE TO CMC ISSUES.
6 SO I'M GOING TO HIGHLIGHT A COUPLE OF INFRASTRUCTURE
7 AND RESOURCE BOTTLENECKS AND BRIEFLY MENTION THE
8 TECHNICAL BOTTLENECKS THAT WE THINK WE CAN ADDRESS
9 IN CALIFORNIA WITH THIS PARTICULAR PROPOSAL.

10 SO FIRST OF ALL, AS MANY OF YOU KNOW,
11 ACADEMIC INSTITUTIONS ARE THE CENTER OF TECHNOLOGY
12 INNOVATION AND THE INITIAL PROCESS DEVELOPMENT IN
13 GMP MANUFACTURING FOR CELL AND GENE THERAPIES, BUT
14 THEY DON'T HAVE SUFFICIENT CAPACITY, RESOURCES, OR
15 PROCESSES FOR LATE STAGE MANUFACTURING, AND THIS IS
16 OFTEN BY DESIGN. THEY FOCUS ON THE EARLY PROCESS
17 DEVELOPMENT AS WELL AS THE EARLY PHASE 1 CLINICAL
18 TRIAL MANUFACTURING.

19 ON THE FLIP SIDE, THERE'S THE INDUSTRY
20 MANUFACTURING RESOURCES. FOR EXAMPLE, THERE'S
21 CONTRACT DEVELOPMENT AND MANUFACTURING ORGANIZATIONS
22 THAT SUPPORT CELL AND GENE THERAPY MANUFACTURING OR
23 IN-HOUSE OPERATIONS OF COMPANIES OF ALL SIZES FROM
24 SMALL BIOTECHS TO LARGE BIOPHARMA. THESE ARE BEST
25 POSITIONED TO INDUSTRIALIZE MANUFACTURING PROCESSES

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1 FOR LATE STAGE CLINICAL TRIALS AND
2 COMMERCIALIZATION, BUT DON'T ALWAYS HAVE THE
3 EXPERTISE IN EMERGING TECHNOLOGY PLATFORMS THAT ARE
4 ARISING FROM ACADEMIA; FOR EXAMPLE, THE CRISPR,
5 LENTI, IMAGING THERAPY, NEW TECHNOLOGIES THAT ARE
6 EMERGING THAT ACADEMIA HAS INNOVATED ON.

7 IN ADDITION TO THESE TWO INFRASTRUCTURE
8 BOTTLENECKS, WE'RE ALL AWARE OF THE COMPLEXITIES OF
9 PRODUCTS AND THE PROCESSES INVOLVED FOR CELL AND
10 GENE THERAPIES, AND THESE CREATE VARIOUS TECHNICAL
11 BOTTLENECKS THAT ARE BEING ADDRESSED IN ALL SORTS OF
12 DIFFERENT WAYS BY BOTH INDIVIDUAL PROJECTS AND
13 PROGRAMS AS WELL AS ON A NATIONAL LEVEL.

14 AND LASTLY, THERE'S AN EVER GROWING DEMAND
15 FOR TRAINED MANUFACTURING AND QUALITY WORKFORCE
16 PARTICULARLY IN THE STATE OF CALIFORNIA AS MORE AND
17 MORE COMPANIES ARE LAUNCHING CELL AND GENE
18 THERAPIES, AND THERE'S A MASSIVE DEMAND FOR MORE
19 WORKERS IN THIS INDUSTRY ACROSS THE ENTIRE SPECTRUM.

20 SO IN ORDER TO ADDRESS THIS, FIRST, WE'RE
21 GOING TO WALK THROUGH THE CALIFORNIA LANDSCAPE FOR
22 MANUFACTURING FOR CELL AND GENE THERAPIES. ON THE
23 ACADEMIC SIDE, THERE ARE ACADEMIC CELL AND GENE
24 THERAPY MANUFACTURING FACILITIES. AS STATED, MANY
25 OF THE RESEARCH ORGANIZATIONS THAT HAVE RECEIVED

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1 CIRM FUNDING IN THE PAST, AND A MAJORITY OF OUR
2 FUNDED PROGRAMS, FROM TRANSLATIONAL TO CLIN2, ARE
3 UTILIZING THESE FACILITIES. SO THESE INCLUDE
4 WELL-ESTABLISHED FACILITIES THAT HAVE BEEN AROUND
5 FOR A LONG TIME, SUCH AS UC DAVIS AND CITY OF HOPE,
6 AS WELL AS NEW ONES THAT ARE EMERGING AT PLACES SUCH
7 AS CEDARS-SINAI, USC, AND UC IRVINE.

8 ON THE INDUSTRY SIDE THERE ARE CELL AND
9 GENE THERAPY MANUFACTURING CONTRACT ORGANIZATIONS
10 THAT DO FEE FOR SERVICE OR PARTNERSHIP MODELS AS
11 WELL AS SOME BIOPHARMA COMPANIES IN CALIFORNIA THAT
12 ALSO HAVE PARTNERSHIP MODELS TO SUPPORT PROJECTS
13 THAT THEY'RE PARTNERING ON. SO ON THE CDMO SIDE,
14 THESE TEND TO RANGE FROM SMALL OPERATIONS ALL THE
15 WAY TO LARGE OPERATIONS OF MULTINATIONAL COMPANIES
16 ON THE CDMO SIDE. AND ON THE BIOPHARMA SIDE, BOTH
17 BAYER AND NOVO NORDISK, TWO OF OUR INDUSTRY ALLIANCE
18 PARTNERS HAVE FACILITIES IN THE STATE OF CALIFORNIA,
19 BUT THEY'RE LOOKING TO SUPPORT THEIR PARTNERED
20 PROJECTS.

21 SO THE INTENT WITH THIS MANUFACTURING
22 CONCEPT PLAN IS TO CREATE A UNIQUE MODEL WHERE THIS
23 PARTNERSHIP AND COLLABORATION BETWEEN THE ACADEMIC
24 FACILITIES AS WELL THE INDUSTRY FACILITIES TO
25 ADDRESS CERTAIN GOALS THAT WE THINK ARE IMPORTANT TO

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1 ADVANCE CELL AND GENE THERAPIES FOR CALIFORNIANS AND
2 THE WORLD. SO AS WE DESCRIBED IN THE STRATEGIC
3 PLAN, OUR VISION IS TO BUILD A NETWORK WHERE CIRM
4 FUNDING TO ACADEMIC GMP FACILITIES IS COORDINATED IN
5 ADDITION TO INDUSTRY PARTNERS BY CIRM TO ADDRESS THE
6 THREE MAIN GOALS THAT ARE LISTED ON THE RIGHT SIDE
7 OF THIS SLIDE.

8 FIRST AND FOREMOST IS TO ACCELERATE AND
9 DERISK THE PATHWAY TO COMMERCIALIZATION FOR CELL AND
10 GENE THERAPIES, PARTICULARLY THE ONES SUPPORTED BY
11 CIRM. SECOND IS TO ADVANCE INDUSTRY STANDARDS AND
12 QUALITY BY DESIGN FOR A GROWING AND EVOLVING
13 INDUSTRY SUCH AS CELL AND GENE THERAPIES TO GET TO
14 THE INDUSTRIALIZATION THAT WE SEE ON THE BIOLOGICS
15 AS WELL AS SMALL MOLECULE SIDE. AND, LASTLY, AS WE
16 WE'VE BEEN NOTING, IS TO BUILD THE MANUFACTURING
17 LEADERSHIP AND WORKFORCE IN CALIFORNIA, INCLUDING
18 OPPORTUNITIES FOR UNDERSERVED POPULATIONS IN
19 PARTICULAR IN THAT RESPECT.

20 SO WITH THAT IN MIND, THERE ARE A FEW
21 FUNCTIONS THAT WE THINK THIS NETWORK CAN ADDRESS,
22 AND I'LL WALK THROUGH SOME OF THOSE HERE. THESE ARE
23 NOT MEANT TO BE LIMITING, BUT MEANT TO BE
24 ILLUSTRATIVE OF WHAT THE CONCEPT PLAN CAN ACHIEVE.

25 SO FIRST AND FOREMOST, THERE ARE A WIDE

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1 RANGE OF MANUFACTURING AND ANALYTICAL TECHNOLOGY
2 PLATFORMS AT PLAY FOR CELL AND GENE THERAPIES. AND
3 WE THINK ANY NETWORK, ESPECIALLY ONE FOR STATES SUCH
4 AS CALIFORNIA, SHOULD REPRESENT THAT WORLD-CLASS
5 EXPERTISE ACROSS THAT WHOLE RANGE.

6 SECONDLY IS TO SUPPORT THE MANUFACTURING
7 OF THERAPIES FOR RARE AND ULTRA RARE DISEASES.
8 THERE'S AN OPPORTUNITY HERE TO TAKE PLATFORM-BASED
9 APPROACHES TO NOT ONLY DEVELOP, BUT MANUFACTURE A
10 LARGE NUMBER OF CANDIDATES TO MEET THE VARIOUS RARE
11 DISEASES THAT ABLA HAS HIGHLIGHTED THAT AFFECT A
12 LARGE POPULATION. SO THESE COULD BE THINGS SUCH AS
13 CRISPR OR LENTI APPROACHES OR AAV APPROACHES WHERE A
14 COMMON TECHNOLOGY PLATFORM CAN ADDRESS A LARGE
15 NUMBER OF DISEASES.

16 WE ALSO WANT TO ACCELERATE AND DERISK LATE
17 STAGE AND COMMERCIAL MANUFACTURING OF THERAPIES.
18 THIS IS A KEY COMPONENT TO HAVING APPROVAL AND
19 COMMERCIALIZATION OF THESE TYPES OF THERAPIES. AND
20 THIS IS GOING TO BECOME A MORE AND MORE RELEVANT
21 FOCUS AREA FOR CIRM AS ITS PORTFOLIO EVOLVES AND
22 CONTINUES TO GROW AS WELL AS THE FIELD AS A WHOLE AS
23 THEY MATURE TO WHERE THERE ARE MORE THERAPIES GOING
24 TO THE CLINIC AND TO COMMERCIALIZATION.

25 AS I MENTIONED PREVIOUSLY, AS THIS NASCENT

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1 INDUSTRY CONTINUES TO MATURE, THERE'S A NEED TO
2 ESTABLISH STANDARDS FOR QUALITY AS WELL AS
3 ACCREDITATION OF MANUFACTURING FACILITIES,
4 PARTICULARLY IN THE ACADEMIC SETTING.

5 AND, LASTLY, IS TO BUILD AN INCLUSIVE
6 WORKFORCE THAT ADDRESSES BOTH ENTRY AND ADVANCEMENT
7 OPPORTUNITIES IN TECHNICAL AND LEADERSHIP CAREER
8 PATHWAYS IN PARTNERSHIP WITH EDUC PROGRAMS AND
9 INDUSTRY STAKEHOLDERS. THESE COULD RANGE FROM
10 COMMUNITY COLLEGES TO BIOTECH COMPANIES TO BIG
11 PHARMA THAT IS PRESENT IN CALIFORNIA.

12 IN FACT, WE WERE TALKING ABOUT EDUC. AT
13 THE CONFERENCE THE LAST FEW DAYS, MANY OF US MET
14 SEVERAL STUDENTS WHO WERE NOT AWARE OF MANUFACTURING
15 CAREER PATHWAYS UNTIL THEY HAD DONE THEIR INTERNSHIP
16 AT COMPANIES OR GMP FACILITIES. AND OUT OF THAT
17 THEY GREW TO REALLY APPRECIATE AND ADMIRE THE
18 WORKFORCE AND THE OPPORTUNITIES PRESENT IN PROCESS
19 DEVELOPMENT AND MANUFACTURING, AND MANY HAVE GONE TO
20 HAVE CAREERS IN THAT SPACE WITH COMPANIES IN
21 CALIFORNIA. SO THERE IS A GROWING AWARENESS IN THE
22 STUDENT POPULATION FOR OPPORTUNITIES FOR CAREER
23 PATHWAYS IN MANUFACTURING.

24 SO WITH THAT, THE NEXT FEW SLIDES ARE
25 REALLY GOING TO FOCUS ON THE FUNDING OPPORTUNITY

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1 ITSELF WITH THE TWO PHASES THAT WE ARE BUILDING OUT
2 HERE THAT WE'RE PROPOSING TO YOU AS WELL AS
3 ACTIVITIES THAT COULD BE INCORPORATED INTO THOSE TWO
4 PHASES.

5 SO THIS PARTICULAR CONCEPT PLAN DESCRIBES
6 A BIPHASIC FUNDING OPPORTUNITY COMPOSED OF TWO
7 PHASES. THE FIRST PHASE IS A MORE PREPARATIVE
8 PHASE, AND THE SECOND PHASE MORE OF A SCALE-UP
9 PHASE.

10 SO BEFORE I JUMP INTO THE DETAILS OF
11 THOSE, I WANT TO ENSURE AND NOTE THAT THE FUNDING
12 THAT'S GOING TO BE PROVIDED FOR THIS OPPORTUNITY IS
13 GOING TO BE SIMILAR TO ALPHA CLINICS WHERE THEY ARE
14 FUNDING OPERATIONAL COSTS AND ENHANCEMENTS AT THE
15 FACILITIES, BUT THE ACTUAL CELL AND GENE THERAPY
16 MANUFACTURING COSTS WOULD STILL COME FROM THE CIRM
17 PIPELINE PROGRAMS LIKE TRAN AND CLIN AWARDS.

18 IN ADDITION, WHILE THESE FUNDING
19 OPPORTUNITIES WILL FOCUS ON FUNDING ACADEMIC GMP
20 FACILITIES, THEY ARE EXPECTED TO HAVE PARTNERSHIPS
21 WITH OTHER ACADEMIC FACILITIES AS WELL AS INDUSTRY
22 STAKEHOLDERS IN THE STATE OF CALIFORNIA. AND I'LL
23 MAP HOW THAT MIGHT PLAY OUT FOR THESE TWO PHASES.

24 SO THE FIRST PHASE IS THE PREPARATIVE
25 PHASE. THIS IS A PROGRAM BUDGET OF \$20 MILLION WITH

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1 A MAX DURATION OF TWO YEARS AND A MAX AWARD AMOUNT
2 OF 2 MILLION FOR EACH AWARD. THE APPLICANT IS AN
3 ACADEMIC CELL AND GENE THERAPY MANUFACTURING
4 FACILITY. AND THEY COULD HAVE OPTIONAL
5 COLLABORATORS THAT THEY NEED FOR THE ACTIVITIES.
6 AND THE PREDOMINANT GOAL IS GOING TO BE INDIVIDUAL
7 FACILITY ENHANCEMENTS AT THOSE ACADEMIC FACILITIES.
8 AND I'LL DESCRIBE WHAT THOSE ACTIVITIES MIGHT ENTAIL
9 AND THE OUTCOME METRICS THAT MIGHT BE LINKED TO THAT
10 IN THE NEXT FEW SLIDES.

11 THE SECOND PHASE WOULD HAVE A PROGRAM
12 BUDGET OF \$60 MILLION WITH A MAX AWARD AMOUNT OF \$5
13 MILLION AND A MAX DURATION OF FIVE YEARS. HERE THE
14 APPLICANT WILL BE THE ACADEMIC CELL AND GENE THERAPY
15 MANUFACTURING FACILITY, BUT IT WILL BE REQUIRED TO
16 HAVE COLLABORATORS AS A PART OF THIS APPROACH
17 BECAUSE THIS IS ALL FOCUSED ON SCALING OUT THE
18 ENHANCEMENTS THAT THEY HAD MADE IN THAT FIRST PHASE.
19 AND THE GOAL HERE WOULD BE TO CREATE NETWORKWIDE
20 SCALING OF ENHANCEMENTS, SPECIALIZATIONS, AND
21 TRAINING PROGRAMS, ALL OF WHICH I'LL DESCRIBE IN THE
22 NEXT FEW SLIDES.

23 SO THE PHASE 2 WILL BE INFORMED IN LARGE
24 PART BY WHAT HAPPENS IN PHASE 1. AND THAT WILL BE
25 COORDINATED BY A STEERING COMMITTEE OF AWARDEES AND

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1 EXTERNAL PARTICIPANTS THAT'S GOING TO ACT AS THE
2 GLUE BETWEEN INDIVIDUAL AWARDEES AS WELL AS THE
3 LINKAGE BETWEEN PHASE 1 AND PHASE 2 AWARD
4 ACTIVITIES. I'LL DESCRIBE WHAT WE ENVISION THE
5 STEERING COMMITTEE TO DO AT THE END OF THIS
6 PRESENTATION.

7 SO I'M GOING TO WALK THROUGH SOME
8 POTENTIAL AWARD ACTIVITIES ACROSS THREE MAJOR
9 CATEGORIES IN THIS SLIDE, AND THE NEXT SLIDE I'LL
10 PRESENT HOW THOSE ACTIVITIES MIGHT BE PHASED FOR
11 PHASE 1 AND PHASE 2. THESE ACTIVITIES ARE NOT MEANT
12 TO BE LIMITING. THEY'RE MEANT TO BE ILLUSTRATIVE TO
13 PROVIDE OVERALL WHAT WE BELIEVE IS THE INTENT OF
14 THIS MANUFACTURING NETWORK CONCEPT PLAN.

15 SO FIRST OF ALL, IT'S DERISKING AND
16 ACCELERATING MANUFACTURING AS WE MENTIONED. SO HERE
17 WE WOULD ANTICIPATE THAT THE ACADEMIC GMP FACILITY
18 APPLICANTS WOULD BE FOCUSING ON MAKING
19 QUALITY-DRIVEN IMPROVEMENTS TO THEIR OPERATIONS THAT
20 DERISK EARLY PROCESS DEVELOPMENT OF THE GMP
21 MANUFACTURING OCCURRING AT THEIR FACILITIES AS WELL
22 AS THE TECH TRANSFER FOR BRINGING PROJECTS INTO
23 THEIR FACILITIES AS WELL AS FOR PROJECTS
24 TRANSITIONING OUT TO INDUSTRY PARTNERS FOR LATE
25 STAGE MANUFACTURING AND COMMERCIAL MANUFACTURING.

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1 IT WOULD ALSO INVOLVE ACTIVELY MITIGATING CAPACITY
2 AND EXAMINES GAPS BY COORDINATING PROJECT EXECUTION
3 ACROSS THE NETWORK.

4 THEN WE ANTICIPATE THIS FUNDING BEING USED
5 FOR SPECIALIZED OFFERINGS. SO THESE FACILITIES AND
6 THEIR PARTNERS COULD BE SPECIALIZING IN PARTICULAR
7 TECHNOLOGY PLATFORMS; FOR EXAMPLE, CRISPR, IMAGING
8 THERAPY, LENTIVIRAL CELL AND GENE THERAPY, OR
9 ANALYTICAL METHODS, OR BEING PIONEERS IN QUALITY BY
10 DESIGN IMPLEMENTATION, AUTOMATION, WHICH IS AN
11 IMPORTANT ASPECT OF SCALING UP, SCALING OUT, AS WELL
12 AS LOWERING MANUFACTURING COSTS, OR THE ULTRA RARE
13 DISEASE MANUFACTURING PLATFORMS THAT I MENTIONED
14 PREVIOUSLY.

15 LASTLY, ON WORKFORCE DEVELOPMENT, WE
16 ANTICIPATE THIS FUNDING OPPORTUNITY BEING USED TO
17 DEVELOP AND IMPLEMENT TRAINING PROGRAMS FOR BOTH
18 TECHNICAL POSITIONS AS WELL AS MENTORSHIP PROGRAMS
19 TO LEADERSHIP POSITIONS ALL IN PARTNERSHIP WITH THE
20 EDUC PROGRAMS THAT I PREVIOUSLY MENTIONED AS WELL AS
21 INDUSTRY STAKEHOLDERS.

22 SO TO RECAP, THE PHASE 1 WOULD BE INITIAL
23 PROGRESS AT INDIVIDUAL FACILITIES, AND PHASE 2 WILL
24 BE NETWORKWIDE IMPLEMENTATION OF THESE ENHANCEMENTS,
25 SPECIALIZATIONS, AND WORKFORCE DEVELOPMENT PROGRAMS

1 ACROSS THE NETWORK IN CALIFORNIA.

2 SO WE'VE BEEN TALKING A LOT ABOUT HOW ON A
3 BIG LEVEL ON THIS. SO I'M GOING TO WALK YOU THROUGH
4 AN ILLUSTRATIVE EXAMPLE TO DEMONSTRATE HOW PHASE 1
5 AND PHASE 2 ACTIVITIES MIGHT INTERPLAY WITH EACH
6 OTHER, AND I'LL USE THAT FIRST EXAMPLE OF
7 QUALITY-DRIVEN OPERATIONAL ENHANCEMENTS TO
8 ILLUSTRATE THAT.

9 SO INDIVIDUAL AWARDEES IN THE PHASE 1
10 AWARD FOR DERISKING MANUFACTURING MAY FOCUS ON
11 QUALITY SYSTEM IMPROVEMENTS, THEY MAY FOCUS ON
12 IMPLEMENTATION OF QUALITY-BY-DESIGN PRINCIPLES, OR
13 THEY MAY BE FOCUSED ON HIRING AND TRAINING STAFF TO
14 BETTER MEET THE NEEDS OF THE PROJECTS THAT THEY
15 SUPPORT, BOTH FROM PROCESS DEVELOPMENT TO INITIAL
16 GMP MANUFACTURING.

17 AND THE OUTCOMES OF SUCH ACTIVITIES FOR A
18 PHASE 1 AWARD MAY BE DRIVEN BY HOW THESE
19 IMPROVEMENTS HAVE IMPROVED EXECUTION OF PROJECTS
20 COMPARED TO HISTORICAL PERFORMANCE OF THEIR
21 FACILITIES.

22 ON THE PHASE 2 SIDE NOW, WITH RESPECT TO
23 ALL THE IMPROVEMENTS AND ENHANCEMENTS THAT WERE MADE
24 AT THE INDIVIDUAL FACILITIES AND HAVING A METRIC ON
25 HOW THOSE PERFORMED IN THE INDIVIDUAL FACILITIES,

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1 PHASE 2 COULD FOCUS ON TAKING THE BEST PRACTICES,
2 THE QUALITY IMPROVEMENTS AND IMPLEMENTING THOSE
3 ACROSS THE NETWORK. SIMILARLY, THEY CAN
4 OPERATIONALIZE PARTNERSHIPS THAT EFFECTIVELY
5 TRANSITION PROJECTS FOR LATE STAGE AND COMMERCIAL
6 MANUFACTURING. THIS IS WHERE THE ACADEMIC GMP
7 FACILITIES WILL CREATE A PATHWAY FOR PROJECTS THAT
8 THEY SUPPORT FROM EARLY PROCESS DEVELOPMENT TO EARLY
9 GMP MANUFACTURING, AND THEN THERE'S A SET OF
10 PARTNERS OR A SET OF PROCESSES THAT COULD ALLOW AND
11 FACILITATE RAPID PROGRESSION OF THOSE PROJECTS TO
12 LATE STAGE MANUFACTURING IN THE INDUSTRIAL SETTING
13 FOR THERAPIES AS THEY GO INTO PIVOTAL CLINICAL
14 TRIALS AND THEN INTO COMMERCIALIZATION.

15 AND IN THOSE INSTANCES THE OUTCOME METRICS
16 CAN BE SUCCESS RATE OF PARTNERSHIP DRIVEN
17 PROGRESSION OF PROJECTS TO LATE STAGE AND COMMERCIAL
18 MANUFACTURING AS WELL AS HOW WELL DOES THE NETWORK
19 IMPLEMENT THE AGREED UPON QUALITY STANDARDS AND
20 PROTOCOLS AND BEST PRACTICES ACROSS ALL THE SITES.

21 SO TO HIGHLIGHT A COUPLE OF OTHER
22 POTENTIAL OUTCOME METRICS FOR THE OTHER AREAS THAT I
23 HAD MENTIONED. SO FAR I'VE BEEN TALKING ABOUT
24 DERISKING MANUFACTURING; BUT ON THE SPECIALIZATIONS
25 AND WORKFORCE DEVELOPMENT SIDE, YOU COULD HAVE PHASE

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1 1 OUTCOME METRICS THAT TALK ABOUT COMPETENCY IN
2 SPECIALIZATION AREAS AS DEMONSTRATED BY EXECUTING
3 PILOT PROJECTS, FOR EXAMPLE, OR IF THEY'RE
4 EMPHASIZING CRISPR TECHNOLOGY PLATFORM, MAYBE THEY
5 DEMONSTRATE HOW THEY ARE ABLE TO MORE EFFECTIVELY
6 DRIVE CRISPR PROJECTS THROUGH THEIR FACILITIES. AND
7 THEN ENROLL THEIR FIRST TRAINEE COHORTS FOR
8 TECHNICAL AND LEADERSHIP TRAINING PROGRAMS ON THE
9 WORKFORCE DEVELOPMENT SIDE.

10 ON THE PHASE 2 SIDE, IT WOULD BE ENROLLING
11 THIS ON OUR NETWORK CAPACITY. SO, FOR EXAMPLE, ON
12 THE SPECIALIZATIONS, HOW WELL ARE THE
13 SPECIALIZATIONS UTILIZED ACROSS CALIFORNIA BY THE
14 COLLABORATING FACILITIES AND PROJECTS.

15 AND THEN ON THE WORKFORCE DEVELOPMENT
16 SIDE, TO SHOW A SUSTAINED ENROLLMENT IN TRAINING
17 PROGRAMS AND THE SUCCESS RATE OF THE TRAINEE JOB
18 PLACEMENT BOTH FOR TECHNICAL POSITIONS AND
19 LEADERSHIP POSITIONS.

20 AS WITH ALL OF OUR RECENT CONCEPT PLANS,
21 THERE IS A DEI COMPONENT AND A KNOWLEDGE COMPONENT.
22 SO FOR THIS PARTICULAR CONCEPT PLAN, THE DEI
23 COMPONENT, THERE'S TWO MAJOR CATEGORIES. THE FIRST
24 AND FOREMOST IS PARTICIPATION IN WORKFORCE
25 DEVELOPMENT PROGRAMS BY UNDERSERVED POPULATIONS.

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1 AND SECONDLY, ON THE PROJECT TEAM SIDE IS THAT DOES
2 THE PROJECT TEAM REPRESENT DIVERSE AND INCLUSIVE
3 PERSPECTIVES AND EXPERIENCES BECAUSE MANUFACTURING
4 HAS A DIRECT LINE TO PATIENTS AND PATIENT THERAPIES.
5 AND SO HERE WE EXPECT THAT THE TEAM ITSELF COULD BE
6 DIVERSE AND INCLUSIVE WITH THOSE PERSPECTIVES AND
7 EXPERIENCES.

8 ON THE KNOWLEDGE SHARING SIDE, THEY WOULD
9 BE REQUIRED TO PROPOSE KNOWLEDGE SHARING PLANS. AND
10 FIRST AND FOREMOST TO DESCRIBE A PLAN TO CAPTURE AND
11 DISSEMINATE RELEVANT KNOW-HOW, OPERATIONAL DATA OF
12 PROCESSES, EXPERTISE AND GUIDANCE WITHIN THE
13 NETWORK. AND THEN IF THERE ARE CORE COMPONENTS IN
14 THEIR ACTIVITIES THAT REQUIRE SHARING, THEY WILL
15 DESCRIBE HOW THE KNOWLEDGE SHARING PLANS ARE
16 CRITICAL TO ACHIEVING THOSE AWARD OBJECTIVES.

17 LASTLY, AS YOU KNOW, BY LAW ALL OF OUR
18 TRAN AND CLIN APPLICATIONS ARE REQUIRED TO HAVE
19 THEIR OWN DATA SHARING AND MANAGEMENT PLANS. SO HOW
20 WILL THESE FACILITIES HAVE DATA MANAGEMENT PROCESSES
21 AND PRACTICES THAT WILL SUPPORT THE TRAN AND CLIN
22 AWARDEE'S ABILITY TO HAVE THEIR OWN RESPECTIVE DATA
23 MANAGEMENT SHARING PLANS EXECUTED.

24 LASTLY, I'M GOING TO END WITH TALKING A
25 LITTLE ABOUT THE STEERING COMMITTEE ITSELF. AS I

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1 MENTIONED, THE STEERING COMMITTEE IS A GROUP BETWEEN
2 THE AWARDEES AND A GROUP BETWEEN THE TWO PHASES. SO
3 THE STEERING COMMITTEE WILL BE COMPOSED OF THE
4 AWARDEES THEMSELVES, OUR CALIFORNIA INDUSTRY
5 PARTNERS, AS WELL AS NATIONAL STAKEHOLDERS. SO
6 THINK OF NIMBLE, ARMY, AND SO ON THAT ALL HAVE
7 SIMILAR EFFORTS ON THE NATIONAL SCALE AROUND
8 MANUFACTURING FOR CELL AND GENE THERAPIES. THIS
9 STEERING COMMITTEE WOULD BE FOCUSED ON FACILITATING
10 THE IDENTIFICATION AND ADOPTION OF STANDARDS,
11 PROTOCOLS, AND BEST PRACTICES ACROSS THE NETWORK AND
12 POTENTIALLY CRITERIA FOR FACILITY ACCREDITATION
13 WHICH MAY BE IMPORTANT GOING FORWARD FOR THIS FIELD.
14 TO MITIGATE CAPACITY AND EXPERTISE GAPS ACROSS
15 PARTICIPATING SITES. SO, FOR EXAMPLE, IF THERE'S A
16 LONG LEAD-TIME AT ONE FACILITY, COULD SOME OF THE
17 PARTNERS TAKE UP THOSE PROJECTS OR COULD THERE BE A
18 WAY TO SHARE KNOWLEDGE AND EXPERTISE ACROSS THE
19 SITES TO FACILITATE EXECUTION OF PROJECTS AT THEIR
20 PARTICULAR SITE.

21 COLLABORATIVE PLANNING FOR PHASE 2
22 PROPOSALS. SO AS I MENTIONED, THE PHASE 2 PROPOSALS
23 WILL BE INFORMED LARGELY BY WHAT HAPPENS IN PHASE 1.
24 AND THIS COORDINATING COMMITTEE HAS AN IMPORTANT
25 FACILITATING ROLE FOR THAT.

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1 TO DEVELOP SYSTEMS AND PROCESSES FOR
2 SHARING INFORMATION AND RESOURCES BETWEEN NETWORK
3 PARTICIPANTS. SO THIS IS CRITICAL IN TERMS OF HOW
4 BEST PRACTICES, PROTOCOLS, DOCUMENTS, TEMPLATES, AND
5 SO ON ARE SHARED BETWEEN ALL THE PARTICIPANTS IN THE
6 NETWORK.

7 LASTLY, TO COORDINATE COLLABORATIVE
8 DEVELOPMENT AND IMPLEMENTATION OF WORKFORCE TRAINING
9 PROGRAMS. SO TAKING WHAT ARE BEST PRACTICES AND
10 COURSEWORK OR TRAINING MODULE DEVELOPMENT ACROSS
11 CERTAIN SITES TO MAKE THOSE AVAILABLE ACROSS THE
12 NETWORK SO THAT PEOPLE ARE NOT REINVENTING THE WHEEL
13 AROUND DEVELOPMENT OF TRAINING PROGRAMS. THEY COULD
14 ALSO BE CRITICAL FOR JOB PLACEMENT AS WELL.

15 SO COMING BACK AROUND TO OUR INITIAL
16 EXAMPLE OF DERISKING MANUFACTURING, I JUST WANT TO
17 HIGHLIGHT HOW THE STEERING COMMITTEE WILL BE PLAYING
18 A ROLE IN THAT SET OF ACTIVITIES. SO WITH DERISKING
19 MANUFACTURING FOR PHASE 1 ACTIVITIES, THE STEERING
20 COMMITTEE COULD BE IDENTIFYING QUALITY STANDARDS FOR
21 ACADEMIC GMP FACILITIES. IT COULD ALSO BE DEFINING
22 KNOWLEDGE SHARING PROCESSES THAT WOULD ALL FEED INTO
23 THE PHASE 2 STEERING COMMITTEE ROLE OF APPLYING THE
24 QUALITY STANDARDS ACROSS THE NETWORK, TO FACILITATE
25 KNOWLEDGE SHARING WITHIN THE NETWORK, AND TO TRIAGE

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1 PROJECTS BY EXPERTISE AND CAPACITY ACROSS THAT
2 NETWORK.

3 SO TO SUMMARIZE THE CONCEPT PLAN ITSELF,
4 THIS HAS A TOTAL PROGRAM BUDGET OF \$80 MILLION.
5 PHASE 1 IS 20 MILLION AND PHASE 2 IS 60 MILLION.
6 THE AWARDS THEMSELVES WILL HAVE AWARD CAPS
7 RESPECTIVE FOR EACH OF THOSE TWO PHASES: 2 MILLION
8 FOR PHASE 1, 5 MILLION FOR PHASE 2. THE ALLOWABLE
9 COSTS INCLUDE DIRECT PROJECT COSTS AND DIRECT
10 FACILITIES COSTS. AND THERE WILL BE A CO-FUNDING
11 COMPONENT TO BOTH OF THESE PHASE AWARDS AT 20
12 PERCENT. AND AS A REMINDER, THE APPLICANTS FOR BOTH
13 THE PHASE 1 AND PHASE 2 AWARDS ARE PROPOSED TO BE
14 CALIFORNIA NONPROFIT ACADEMIC GMP MANUFACTURING
15 FACILITIES WITH A TRACK RECORD OF CELL AND GENE
16 THERAPY PROJECT SUPPORT.

17 SO WITH THAT, I ASK THE BOARD TO APPROVE
18 THIS CONCEPT, AND I'M HAPPY TO TAKE ANY QUESTIONS.
19 ACTUALLY I'LL LEAVE IT AT THIS SLIDE FOR NOW.

20 CHAIRMAN THOMAS: THANK YOU, SHYAM. IS
21 THERE A MOTION TO APPROVE?

22 DR. DULIEGE: MOVE.

23 CHAIRMAN THOMAS: MOVED BY ANNE-MARIE.
24 SECOND?

25 DR. FISCHER-COLBRIE: SECOND.

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1 CHAIRMAN THOMAS: THANK YOU. ALL RIGHT.
2 QUESTIONS AND COMMENTS FROM MEMBERS OF THE BOARD? I
3 CAN'T TELL WHAT THE ORDER IS HERE, SO I'M JUST GOING
4 TO START WITH BARRY, THEN TO MOHAMMED, THEN TO
5 ANNE-MARIE.

6 DR. SELICK: THANKS, J.T. AND, SHYAM,
7 THANK YOU VERY MUCH FOR THE PRESENTATION.

8 ONE THING THAT WASN'T OBVIOUS TO ME, YOU
9 TALK ABOUT WORKFORCE DEVELOPMENT AND PUTTING IN
10 PLACE TRAINING PROGRAMS, BUT IN THAT \$80 MILLION
11 BUDGET IT DIDN'T SEEM THAT THERE WAS FUNDS EARMARKED
12 FOR THAT SPECIFICALLY. CAN YOU SHARE SOME OF YOUR
13 THINKING WITH RESPECT TO HOW YOU'RE THINKING ABOUT
14 THAT? WHAT ARE THE NATURE OF THE TRAINING PROGRAMS
15 THAT YOU ARE ENVISIONING? AND WILL THERE BE A
16 SEPARATE BUDGET SET ASIDE FOR THOSE TWO, FOR
17 EXAMPLE, SUPPORT A PROGRAM AT SAN FRANCISCO STATE
18 UNIVERSITY WHO HAS A KIND OF RICH HISTORY OF
19 TRAINING SCIENTISTS FOR THE BIOTECH INDUSTRY DATING
20 BACK ALMOST 50 YEARS.

21 DR. PATEL: THANK YOU, BARRY, FOR THAT
22 QUESTION. SO ONE OF THE THINGS YOU POINTED OUT WAS
23 THAT THE DIFFERENT FACILITIES HAVE DIFFERENT RANGES
24 OF TRAINING PROGRAMS AND DIFFERENT PARTNERS THAT
25 THEY MAY ALREADY BE WORKING WITH, COMMUNITY

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1 COLLEGES, STATE UNIVERSITIES, AS WELL AS INDUSTRY
2 PARTNERS. SO WHILE WE EXPECT THAT EVERY APPLICANT
3 IS GOING TO BE RESPONSIVE IN SOME WAY TO ALL THREE
4 OF THOSE CATEGORIES, THE LEVEL OF FUNDING THEY MIGHT
5 NEED FOR CERTAIN AREAS IS GOING TO VARY BETWEEN THE
6 APPLICANTS. SO RATHER THAN SETTING SPECIFIC BUCKETS
7 FOR EACH OF THOSE THREE CATEGORIES, WE ARE THINKING
8 SOME FLEXIBILITY FOR THEM TO IDENTIFY WHERE THEY
9 FEEL THE MOST NEED THERE IS IN THOSE AREAS FOR THEIR
10 OWN ACTIVITIES AND BUDGETS. BUT WE WOULD EXPECT
11 THAT ALL APPLICANTS ARE ADDRESSING SPECIFICALLY ON
12 ALL THREE OF THOSE CATEGORIES. SO THAT'S DERISKING
13 MANUFACTURING, SPECIALIZATION, AS WELL AS WORKFORCE
14 DEVELOPMENT.

15 DR. SELICK: OKAY. THANKS, SHYAM.

16 CHAIRMAN THOMAS: THANK YOU. MOHAMMED IS
17 NEXT, ANNE-MARIE, AND THEN HAIFAA.

18 DR. ABOUSALEM: SHYAM, FIRST I'D LIKE TO
19 THANK YOU FOR THE CLEAR PRESENTATION, AND I REALLY
20 SUPPORT THIS INITIATIVE BECAUSE IT DOES TAKE THE
21 CIRM ACTIVITY AND PUSH FORWARD OUR INITIATIVE DOWN
22 THE SUPPLY CHAIN, IF YOU WILL, AND ALLOWS US TO
23 BRING THOSE SOLUTIONS TO MARKET.

24 I'VE GOT TWO QUESTIONS. I DON'T KNOW IF
25 YOU'VE CONSIDERED THE INTELLECTUAL PROPERTY

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1 PROVISIONS THAT YOU WOULD ATTACH TO THIS ACTIVITY
2 BECAUSE MY RECOMMENDATION IS TO LOOK AT THAT VERY
3 CLOSELY BECAUSE NOW WE'RE GOING TO BE FUNDING
4 ASSETS, PERHAPS PHYSICAL ASSETS, AT THESE
5 UNIVERSITIES THAT MAY OR MAY NOT BE USED FOR THE
6 PRODUCTION OF CIRM-FUNDED SOLUTIONS. SO THERE IS AN
7 OPPORTUNITY FOR SOME JOINT VALUE THAT WOULD BE
8 ACCRUED FROM THESE ASSETS TO BRING BACK FUNDING TO
9 CIRM THAT IS NOT NECESSARILY THE SAME WAY THE IP
10 POLICY FOR CIRM PROGRAMS ARE RUNNING TODAY. SO
11 THAT'S ONE. I'D LIKE TO HEAR FROM YOU ON THAT.

12 BUT THE SECOND COMMENT OR QUESTION IS,
13 AGAIN, SINCE THERE'S GOING TO BE A PHYSICAL ASSET IN
14 SOME CASES, I DON'T KNOW IF YOU'VE CONSIDERED THIS,
15 BUT IF NOT, YOU SHOULD, ATTACHING NAMING RIGHTS TO
16 THE FACILITY OR SPONSORSHIP PRICE THAT GO BEYOND THE
17 STANDARD CIRM ACKNOWLEDGEMENT. BECAUSE PART OF WHAT
18 WE NEED TO DO AS CIRM IS TO PUSH THE MESSAGE OUT,
19 NOT JUST FOR THE INDIVIDUAL SOLUTIONS THAT GO OUT,
20 BUT FOR CIRM ITSELF AND CIRM'S INITIATIVE TO HELP
21 WITH INCREASING THE ENGAGEMENT OF CALIFORNIA
22 CITIZENS WITH CIRM, WITH THE PROGRAMS, WITH THE
23 THERAPIES, WITH THE TESTING.

24 SO PUTTING THE NAME OUT IN THESE ACADEMIC
25 INSTITUTIONS, BIG SIGN THAT SAYS FUNDED BY CIRM OR A

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1 CIRM FACILITY, THAT MAY BE VERY HELPFUL. SO I WANT
2 TO HEAR WHAT YOUR THOUGHTS ARE ON BOTH OF THESE.
3 THANK YOU.

4 DR. PATEL: THANK YOU. SO THOSE ARE BOTH
5 EXCELLENT POINTS AND QUESTIONS. ON THE FIRST ONE
6 REGARDING IP, SO WHAT WE ANTICIPATE HERE IS THAT OUR
7 CURRENT IP AND REVENUE SHARING POLICIES WOULD APPLY.
8 AND I'LL DESCRIBE THAT TO THE BEST OF MY ABILITY,
9 AND MAYBE KEVIN MARKS OR BEN HUANG MAY HAVE TO STEP
10 IN A LITTLE BIT.

11 SO THE WAY THAT OUR CURRENT IP REVENUE
12 SHARING PROVISIONS WORK IS THAT ACROSS ALL OF OUR
13 FUNDING MECHANISMS, IF ANY IP WAS GENERATED, AND IF
14 IT'S MONETIZED IN SOME WAY DOWN THE ROAD, THAT
15 REVENUE NEEDS TO BE SHARED WITH THE STATE OF
16 CALIFORNIA. HERE IN THIS INSTANCE IF ANY IP IS
17 GENERATED, THAT'S TRUE. ALSO, IN TERMS OF
18 TECHNOLOGY AND DATA THAT IS GENERATED AND THAT IS
19 USED FOR REGULATORY FILINGS TO SUPPORT APPROVAL OF
20 THERAPIES, THAT ALSO COMES INTO PLAY FOR REVENUE
21 SHARING. SO YOU'RE RIGHT, THAT HERE WE COULD HAVE
22 KIND OF A BROADER BASE FOR REVENUE SHARING BASED ON
23 HOW THE ACADEMIC FACILITIES IMPLEMENT ANY
24 SPECIALIZATIONS OR ANY IP THAT'S GENERATED FROM THIS
25 PARTICULAR FUNDING MECHANISM.

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1 AND I THINK MARIA MILLAN HAS A POINT SHE
2 WANTS TO RAISE HERE.

3 DR. MILLAN: JUST FOR CLARIFICATION,
4 SHYAM. THE PROJECTS, FOR INSTANCE, THE CLINICAL
5 AWARDS HAVE THOSE PROVISIONS ATTACHED TO THEM ON A
6 PER PROJECT BASIS. I JUST DON'T WANT TO GIVE THE
7 IMPRESSION THAT ANYBODY WHO ENDS UP GOING THROUGH
8 THIS FACILITY THEN HAS THESE IP AND REVENUE SHARING
9 TAGGED ONTO THEM. THAT WOULD BE SOMETHING THAT WE
10 WOULD NOT BE ABLE TO DO. I WANTED TO JUST KIND OF
11 HIGHLIGHT WHAT SHYAM SAID WITH THAT CLARIFICATION.

12 DR. ABOUSALEM: MARIA, THIS IS EXACTLY MY
13 POINT. A RECOMMENDATION TO LOOK INTO THAT. AGAIN,
14 IF YOUR'RE FUNDING A FACILITY THAT WILL BE USED,
15 LET'S SAY, 50 PERCENT OF THE TIME FOR
16 NON-CIRM-FUNDED PROGRAMS, YOU HAVE STILL ENABLED
17 THAT FACILITY TO DO THAT WORK. AND YOU MAY WANT TO
18 CONSIDER IP REVENUE THROUGH THAT ENABLING MECHANISM.
19 JUST A RECOMMENDATION.

20 DR. MILLAN: THANK YOU SO MUCH. I JUST
21 WANTED TO CLARIFY -- MAKE ANOTHER CLARIFICATION.
22 THESE FUNDS WILL NOT BE USED FOR ANY BUILDING OF
23 FACILITIES. IT WILL BE FOR OPERATIONAL COSTS. SO I
24 GUESS ONE WAY TO LOOK AT IT IS KIND OF THE BUSINESS
25 PRACTICES AND RULES THAT ONE WOULD FOLLOW AND MODELS

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1 ONE WOULD FOLLOW IS IF THIS NETWORK THAT WE FUNDED,
2 ONE LARGE CDMO, CONTRACT MANUFACTURING RESOURCE, FOR
3 INSTANCE, WHAT RULES WOULD GUIDE THAT IF PRIVATE
4 ENTITIES OR OTHER ENTITIES, ORGANIZATIONS USED THAT
5 FACILITY. SO THAT, I THINK, IS WHAT WE NEED TO TAKE
6 AS KIND OF A BASELINE AND HOW THAT CAN BE STRUCTURED
7 WITH RELATION TO IP.

8 AGAIN, AS SHYAM SAID, WE HAVE OUR LEGAL
9 TEAM AVAILABLE. BUT THANK YOU FOR YOUR SUGGESTIONS.
10 I THINK THERE ARE SOME OTHER ASPECTS OF THAT THAT WE
11 SHOULD EXPLORE.

12 DR. PATEL: IP, I WAS REFERRING TO A
13 SPECIFIC IP GENERATED BY THE ACADEMIC FACILITIES
14 THEMSELVES, THE AWARDEES, AS PART OF DOING THE WORK
15 IN THIS AWARD. SO IT DOES NOT FALL -- IT WOULD NOT
16 ENSNARE THE IP OF ANY PROJECTS THAT THEY ARE
17 SUPPORTING THROUGH THAT. AS MARIA MENTIONED, THE
18 TRAN AND CLIN PROGRAMS HAVE THEIR OWN REVENUE
19 SHARING PROVISIONS APPLIED TO THOSE, BUT THERE COULD
20 BE SOME BROADER IP THAT MAY BE GENERATED HERE THAT
21 COULD POTENTIALLY CREATE REVENUE SHARING DOWN THE
22 ROAD.

23 AND THEN ON THE SECOND POINT THAT YOU HAD
24 RAISED AROUND THE NAMING RIGHTS, I THINK MARIA
25 ADDRESSES TO A CERTAIN EXTENT THAT WE ARE NOT

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1 ACTUALLY BUILDING THE FACILITIES THEMSELVES, BUT
2 THERE HAVE BEEN SEVERAL RECOMMENDATIONS FROM SOME OF
3 THE ACADEMIC FACILITIES THAT WE SPOKE TO DURING OUR
4 OUTREACH ABOUT CREATING KIND OF AN ACCREDITATION,
5 CIRM ACCREDITATION. THAT, I THINK, WOULD BE AN
6 INTERESTING CONCEPT THAT THE STEERING COMMITTEE
7 COULD PROPOSE TO LOOK AT WOULD BE, NOW THAT WE HAVE
8 ESTABLISHED PARTICULAR QUALITY STANDARDS AS WELL AS
9 SOME PROCESSES AND BEST PRACTICES ACROSS THE STATE
10 OF CALIFORNIA FOR THESE FACILITIES, THEN THERE'S
11 SOME SORT OF CIRM-ACCREDITED STATUS THAT THEY HAVE
12 NOW THAT COULD POTENTIALLY HELP THEM AS WELL IN
13 TERMS OF BRINGING IN PROJECTS BECAUSE NOW THERE IS A
14 SET OF STANDARDS THAT THE SPONSORS THEMSELVES CAN
15 RELY ON IN USING THESE FACILITIES.

16 CHAIRMAN THOMAS: THANK YOU. ANNE-MARIE,
17 YOU'RE NEXT.

18 DR. DULIEGE: THANK YOU. VERY BRIEFLY.
19 SHYAM, EXCELLENT PRESENTATION. AND TO ALL, JUST AN
20 EXCELLENT INITIATIVE. WE KNOW THAT THE FIELD OF CMC
21 FOR REGENERATIVE MEDICINE IS SO COMPLEX, THAT I AM
22 CONVINCED THAT THIS WILL HAVE A VERY POSITIVE IMPACT
23 OVERALL IN BRINGING PRODUCTS CLOSER AND FASTER TO
24 PATIENTS.

25 SO MY OVERALL QUESTION IS CAN YOU TELL ME

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1 HOW MUCH IS THE TOTAL COST OF THIS PROJECT, THE
2 TITLE ON THIS PROJECT, COMPARED TO THE ENTIRE \$5.5
3 BILLION BUDGET, JUST A ROUGH ESTIMATE? IS IT 7, 10
4 PERCENT, ROUGHLY?

5 DR. PATEL: 80 MILLION. SO 80 MILLION
6 DIVIDED BY 5.5 BILLION. I'M NOT THAT GOOD AT MATH.
7 AS MY COLLEGES WILL KNOW, RECENTLY I CLAIMED I HAD
8 MY 25TH WEDDING ANNIVERSARY WHEN, IN FACT, IT WAS
9 THE 15TH. SO I'M GOING TO NEED A CALCULATOR HERE TO
10 GET THIS NUMBER RIGHT. I KNOW SOMEBODY ELSE HAS IT
11 ON HAND.

12 CHAIRMAN THOMAS: WHILE WE'RE FIGURING
13 THAT OUT, HAIFAA.

14 DR. LEVITT: TWO PERCENT.

15 DR. PATEL: ABOUT 1.4, 5 PERCENT.

16 DR. DULIEGE: VERY WELL WORTH IT. VERY
17 WELL WORTH IT.

18 DR. ABDULHAQ: A BRIEF COMMENT. I DO FEEL
19 VERY STRONGLY ABOUT THIS. I THINK THIS IS GOING TO
20 BE A GREAT PROGRAM. AND AS A CLINICIAN, I CAN SPEAK
21 TO THE CLINICAL AND PRACTICAL ASPECTS. FOR EXAMPLE,
22 FOR OUR PATIENTS WITH MULTIPLE MYELOMA, THERE ARE
23 TWO GREAT THERAPIES THAT ARE APPROVED, CAR-T
24 THERAPIES. AND UNFORTUNATELY LESS THAN 20 PERCENT
25 OF THE PATIENTS WHO ARE CANDIDATES FOR THIS

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1 TREATMENT CAN RECEIVE IT FOR VARIOUS REASONS. BUT
2 ONE IMPORTANT REASON IS JUST NOT BEING ABLE TO
3 MANUFACTURE THIS AND BEING ABLE TO PROVIDE IT TO
4 PATIENTS. SO I'M SO EXCITED TO HEAR ABOUT THIS
5 PROGRAM AND THANK YOU.

6 CHAIRMAN THOMAS: THANK YOU, HAIFA. OTHER
7 COMMENTS FROM MEMBERS OF THE BOARD? PAT.

8 DR. LEVIN: I WAS JUST WONDERING ABOUT THE
9 ADDITIONAL CIRM GOLD SEAL OF APPROVAL, HOW THAT
10 DIFFERS FROM THE FACILITIES MEETING FDA REQUIREMENTS
11 AND OTHER REQUIREMENTS THAT ARE ALREADY STANDARDS IN
12 THE FIELD. IS THIS UPPING IT? IS IT DUPLICATING
13 IT, OR... THAT'S MY QUESTION.

14 DR. PATEL: IT'S A GREAT QUESTION. SO IT
15 WOULD NOT BE IN LIEU OF ANY SORT OF GMP
16 CERTIFICATIONS THAT THE FACILITIES NEED TO HAVE. SO
17 THERE ARE A SPECIFIC SET OF GMP REQUIREMENTS THAT
18 THEY'RE MEETING FOR BEING ABLE TO SUPPORT PHASE 1
19 CLINICAL TRIALS. HERE IT WOULD BE BASICALLY THAT
20 THERE'S A CERTAIN LEVEL OF QUALITY POTENTIALLY
21 THAT'S BEING IMPLEMENTED WITH RESPECT TO THEIR
22 QUALITY SYSTEMS, GOING ABOVE AND BEYOND WHAT THEIR
23 GMP REQUIREMENTS MIGHT BE, AS WELL AS CREATING THESE
24 TEMPLATES FOR TECH TRANSFER FOR PROJECTS COMING IN
25 AND OUT, THOSE TYPES OF THINGS.

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1 DR. LEVITT: SO IT'S NOT DUPLICATIVE.
2 IT'S IN ADDITION. I JUST WANT TO MAKE SURE THAT
3 IT'S NOT ADDING MORE WORK THAT'S NOT NECESSARILY
4 REQUIRED FOR -- I THINK THIS IS A REALLY CRITICAL
5 INITIATIVE OBVIOUSLY. SO IT'S NOT ADDING WHAT I
6 WOULD SOMETIMES DEFINE AS BUSY WORK BECAUSE THEY'RE
7 ALREADY MEETING VERY HIGH STANDARDS. IF IT'S
8 MEETING HIGHER STANDS, THAT WOULD SPEED UP THE
9 PROCESS FOR QUALITY MANUFACTURING IN CALIFORNIA, AND
10 I THINK THAT THAT'S GREAT.

11 CHAIRMAN THOMAS: OKAY. YSABEL.

12 MS. DURON: THANK YOU, J.T. TO THE
13 POINT -- THANKS VERY MUCH FOR THE PRESENTATION. IT
14 WAS QUITE EXCELLENT. I'M VERY EXCITED ABOUT THE
15 ASPECT OF WORKFORCE DEVELOPMENT AND APPRECIATE THERE
16 WERE MENTIONS ALSO OF INTERNSHIPS. GLAD TO SEE
17 THAT, IN FACT, WE DO ALREADY HAVE SOME UNIVERSITY
18 RELATIONSHIPS AND OPPORTUNITIES.

19 I TOO HAD SOME OF THOSE CONVERSATIONS AT
20 THE BRIDGES MEETING WHERE I HEARD STUDENTS THINKING
21 OUTSIDE THE BOX OF, NOT IN THE LAB PER SE, BUT IN
22 THE INDUSTRY PART. SO I'M GLAD THAT WE CAN OFFER
23 THROUGH THOSE INTERNSHIPS AND WORKFORCE DEVELOPMENT
24 JOBS A CHANCE FOR THEM TO SEE THE SCIENCE THROUGH A
25 DIFFERENT LENS.

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1 AND I THINK THAT'S ALSO VERY MUCH
2 IMPORTANT TO PROMOTE IN TERMS OF THE DEVELOPMENT OF
3 A DIVERSE CALIFORNIA WORKFORCE IN THE SCIENCES. AND
4 SO I HOPE THAT WE AND THE COMMUNICATIONS
5 SUBCOMMITTEE CAN FIND WAYS IN WHICH WE CAN ALSO HELP
6 YOU ONCE ALL OF THIS IS WORKED OUT TO SEE HOW WE CAN
7 ALSO SHINE A LIGHT ON THAT. IT'S NOT JUST IN THE
8 LAB, BUT IT'S ALSO OUT THERE IN THE FIELDS AND THERE
9 ARE OPPORTUNITIES FOR OUR FUTURE LEADERS. THANK
10 YOU.

11 DR. PATEL: THANK YOU. I THINK THAT WILL
12 BE CRITICAL.

13 CHAIRMAN THOMAS: THANK YOU, YSABEL.
14 LARRY.

15 DR. GOLDSTEIN: GREAT JOB, SHYAM. I THINK
16 IT'S A TERRIFIC PROGRAM, AND I THINK MY PREDICTION
17 IS THAT IT'S GOING TO NEED TO EXPAND AS TIME GOES ON
18 BECAUSE MANUFACTURING IS GOING TO BE A CONTINUED
19 BOTTLENECK IN THE DEVELOPMENT OF CELLS AND GENES AND
20 EVERYTHING ELSE.

21 MY QUESTION IS HAVE YOU THOUGHT ABOUT
22 ADDING AN ANNUAL MEETING TO THE PROGRAM PLAN BECAUSE
23 IT SEEMS THAT BRINGING THESE GUYS TOGETHER EVERY
24 YEAR TO TALK ABOUT THEIR ENHANCEMENTS AND
25 BREAKTHROUGHS, THIS WILL BE A RAPIDLY MOVING AREA.

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1 DR. PATEL: YES, WE DID. WE THOUGHT ABOUT
2 THE ANNUAL MEETING, AND THEN WE KIND OF MOVED TOWARD
3 THE STEERING COMMITTEE WHICH IS PROBABLY GOING TO
4 MEET MORE FREQUENTLY THAN ANNUALLY. SO THAT WOULD
5 ACTUALLY BRING THAT TOGETHER. A POINT THAT YOU
6 RAISED COULD BE REALLY INTERESTING IS TO HAVE AN
7 ANNUAL MEETING WITH ALPHA STEM CELL CLINICS SIDE
8 WHERE YOU HAVE STAKEHOLDERS ALSO ATTENDING THAT
9 MEETING AND TURNING IT INTO CONFERENCE AND
10 PRESENTATIONS AND SO ON. AND THAT IS SOMETHING THAT
11 WE HAVE CONSIDERED IN THE PAST AND MAYBE WORTH
12 CONSIDERING HERE.

13 MR. GOLDSTEIN: WELL, THE THING ABOUT AN
14 ANNUAL MEETING IS THAT THE FOLKS WHO ARE NOT THE
15 LEADERSHIP CAN ATTEND THOSE AND LEARN FROM EACH
16 OTHER.

17 DR. PATEL: THAT'S A GREAT POINT. WE CAN
18 BUILD THAT INTO THE -- I THINK THE WAY THAT WE WERE
19 DOING IN THE PAST IS THAT THE ANNUAL MEETINGS COME
20 OUT OF THE CONFERENCE BUDGET, AND SO WE WOULD BE
21 ABLE TO INCORPORATE THAT INTO THAT.

22 CHAIRMAN THOMAS: THANK YOU. I DON'T SEE
23 ANY OTHER BOARD MEMBER HANDS RAISED. AS WE NOTED IN
24 THE SCIENCE SUBCOMMITTEE, THIS CONCEPT PLAN, WHICH
25 OBVIOUSLY REFLECTS A HUGE AMOUNT OF WORK, HAS BEEN A

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1 LONG TIME IN COMING. THERE WAS A GREAT DEAL OF WORK
2 PUT INTO CONVENING THE MANUFACTURING SYMPOSIUM THAT
3 TOOK PLACE IN 2021, AND ALL OF THIS FLOWS FROM THAT.
4 SO THIS IS A HIGHLY CONSIDERED PROGRAM THAT I THINK
5 ALL OF US BELIEVE WILL HAVE A DRAMATIC IMPACT.
6 SHYAM, CONGRATULATIONS TO YOU AND THE TEAM FOR
7 PUTTING THIS ALTOGETHER.

8 DO WE HAVE ANY COMMENTS FROM MEMBERS OF
9 THE PUBLIC ON THIS MOTION?

10 MS. BONNEVILLE: I DO NOT SEE ANY.

11 CHAIRMAN THOMAS: MARIA, WILL YOU PLEASE
12 CALL THE ROLL.

13 MS. BONNEVILLE: YES.

14 HAIFAA ABDULHAQ.

15 DR. ABDULHAQ: YES.

16 MS. BONNEVILLE: MOHAMMED ABOUSALEM.

17 DR. ABOUSALEM: YES.

18 MS. BONNEVILLE: KIM BARRETT.

19 DR. BARRETT: AYE.

20 MS. BONNEVILLE: GEORGE BLUMENTHAL.

21 DR. BLUMENTHAL: YES.

22 MS. BONNEVILLE: MICHAEL BOTCHAN.

23 DR. BOTCHAN: AYE.

24 MS. BONNEVILLE: LINDA BOXER.

25 DR. BOXER: YES.

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1 MS. BONNEVILLE: LEONDR A CLARK-HARVEY.
2 DR. CLARK-HARVEY: YES.
3 MS. BONNEVILLE: ANNE-MARIE DULIEGE.
4 DR. DULIEGE: YES.
5 MS. BONNEVILLE: YSABEL DURON.
6 MS. DURON: YES.
7 MS. BONNEVILLE: MARK FISCHER-COLBRIE.
8 DR. FISCHER-COLBRIE: AYE.
9 MS. BONNEVILLE: FRED FISHER.
10 DR. FISHER: YES.
11 MS. BONNEVILLE: ELENA FLOWERS.
12 DR. FLOWERS: YES.
13 MS. BONNEVILLE: JUDY GASSON.
14 DR. GASSON: YES.
15 MS. BONNEVILLE: LARRY GOLDSTEIN.
16 DR. GOLDSTEIN: YES.
17 MS. BONNEVILLE: DAVID HIGGINS.
18 DR. HIGGINS: YES.
19 MS. BONNEVILLE: RICH LAJARA.
20 MR. LAJARA: YES.
21 MS. BONNEVILLE: PAT LEVITT.
22 DR. LEVITT: YES.
23 MS. BONNEVILLE: DAVID LO.
24 DR. LO: YES.
25 MS. BONNEVILLE: LINDA MALKAS.

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1 DR. MALKAS: YES.
2 MS. BONNEVILLE: SHLOMO MELMED.
3 DR. MELMED: YES.
4 MS. BONNEVILLE: CHRISTINE MIASKOWSKI.
5 DR. MIASKOWSKI: YES.
6 MS. BONNEVILLE: LAUREN MILLER-ROGEN.
7 MS. MILLER-ROGEN: YES.
8 MS. BONNEVILLE: ADRIANA PADILLA.
9 DR. PADILLA: YES.
10 MS. BONNEVILLE: AL ROWLETT.
11 MR. ROWLETT: YES.
12 MS. BONNEVILLE: BARRY SELICK.
13 DR. SELICK: YES.
14 MS. BONNEVILLE: MARVIN SOUTHARD.
15 DR. SOUTHARD: YES.
16 MS. BONNEVILLE: MICHAEL STAMOS.
17 DR. STAMOS: YES.
18 MS. BONNEVILLE: JONATHAN THOMAS.
19 CHAIRMAN THOMAS: YES.
20 MS. BONNEVILLE: ART TORRES.
21 MR. TORRES: AYE. AND THANK YOU, SHYAM.
22 MS. BONNEVILLE: THE MOTION CARRIES.
23 CHAIRMAN THOMAS: THANK YOU, MARIA. THANK
24 YOU, EVERYBODY.
25 ITEM 9, CONSIDERATION OF REVISION TO CIRM

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1 COMPENSATION LEVELS. KEVIN MARKS. KEVIN.

2 DR. MARKS: THANK YOU, CHAIRMAN THOMAS.

3 I'M GOING TO ASK -- MARIANNE IS GOING TO ADVANCE THE
4 SLIDES FOR ME.

5 AS A PART OF THIS PRESENTATION, THERE'S
6 THREE DOCUMENTS WE'RE GOING TO ASK THE BOARD TO
7 CONSIDER. ONE IS THE PRESENTATION THAT I WILL WALK
8 YOU THROUGH WHICH OUTLINES THE SCOPE OF THIS
9 HR-RELATED PROJECT. THE SECOND DOCUMENT WILL BE A
10 REVISION TO THE COMPENSATION, THE CIRM COMPENSATION
11 LEVELS. THEY COME AS A RESULT OF THIS. AND THE
12 THIRD IS A BACKUP DOCUMENT WHICH SHOWS THE REVISED
13 SALARY RANGES THAT WE'VE BEEN CONSIDERING IN
14 FORMULATION OF THE COMPENSATION LEVELS. NEXT SLIDE
15 PLEASE.

16 ACTUALLY TWO SLIDES. WE'VE DONE THE
17 MISSION, SO WE CAN SKIP RIGHT TO THE OVERALL SCOPE
18 OF THE PROJECT. AROUND MAY OR EARLY JUNE OF LAST
19 YEAR, THE BOARD REQUESTED THAT THE STAFF TAKE A LOOK
20 AT THE SALARY RANGES AND RELATIVE MARKET DATA ACROSS
21 THE ORGANIZATION. THE LAST TIME THAT WAS DONE BY AN
22 EXTERNAL AGENCY WAS IN 2007. SO IT APPEARED TIME TO
23 ENSURE THAT THE COMPENSATION RANGES FOR EACH OF THE
24 POSITIONS AS WELL AS THE COMPENSATION LEVELS ACROSS
25 THE ORGANIZATION CONTINUE TO BE APPROPRIATE.

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1 WHILE WE WERE DOING THIS, AND
2 UNFORTUNATELY WE HAVE HAD AN EXTENSIVE DELAY IN
3 GATHERING THIS INFORMATION, BUT WHAT THIS ALLOWED US
4 TO DO IS ACTUALLY TAKE A BROADER LOOK AT OUR CURRENT
5 HR STRATEGIES AND A LOT OF THE FOUNDATIONAL PIECES
6 OF THE HR FUNCTION IN OUR PROGRAM AND SEE IF WE
7 NEEDED TO MAKE ANY IMPROVEMENTS TO ALIGN WITH THE
8 DIRECTION WE WERE TAKING AS AN AGENCY IN ACCORDANCE
9 WITH THE NEW STRATEGIC PLAN. NEXT SLIDE PLEASE.

10 SO SCOPE OF THE COMPENSATION PROJECT
11 STARTED WITH JUST LOOKING AT A DETAILED SUMMARY OF
12 THE RELATIVE WORTH OF THE JOBS, LOOKING AT OUR
13 COMPETITIVE AND INTERNAL ALIGNMENT. WE WANTED TO
14 MAKE SURE THAT WE STILL HAVE THE ABILITY TO ATTRACT
15 GOOD TALENT AND RETAIN GOOD TALENT. SO PART OF THAT
16 WAS REALLY IDENTIFYING AND COLLECTING OUR DATA
17 SOURCES.

18 WHAT WE WERE ABLE TO DO, AGAIN AS A RESULT
19 OF A LITTLE BIT OF THE DELAY, IS WE COULD LOOK AT A
20 COMPENSATION STRUCTURE MORE BROADLY BECAUSE WE COULD
21 TAKE A DEEPER DIVE INTO OUR HR STRATEGY AND ENSURE
22 THAT OUR COMPENSATION PHILOSOPHY, MISSION, CULTURE,
23 AND BUSINESS MODEL, THERE'S CONNECTIVITY ACROSS THE
24 ORGANIZATION. THE OTHER THING WE WANTED TO DO TOO
25 IS COME UP WITH MORE OF A FORMULAIC DOCUMENT TO

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1 PROCESS THAT TAKES A LOOK AT HOW WE DO OUR JOB
2 ANALYSIS, LOOK AT OUR INTERNAL AND EXTERNAL
3 EVALUATIONS OF OPPORTUNITIES, AND MAKING SURE THAT
4 WHEN WE HAVE POSITIONS, OUR CURRENT POSITIONS AND
5 ANY NEW POSITIONS, THAT WE HAVE THE ABILITY TO
6 ASSIGN THEM TO A GRADE AND PAY LEVEL AND ROLE WITHIN
7 OUR OVERALL JOB STRUCTURE. NEXT SLIDE.

8 SO THE HR PART OF THIS PROJECT WAS REALLY
9 KIND OF TAKING A DEEPER DIVE AND, ONE, JUST ENSURING
10 THAT ALL OF OUR POSITIONS HAVE DUTY STATEMENTS AND
11 THEIR JOB DESCRIPTIONS. WE WANTED TO LOOK AT
12 LEVELING ACROSS THE ORGANIZATION BECAUSE THERE
13 APPEARED TO BE SOME LEVELS OF INCONSISTENCY. FOR
14 EXAMPLE, OUR VICE PRESIDENT LEVELS IN THE
15 ORGANIZATION WERE AT TWO DIFFERENT LEVELS. WE HAD
16 ASSOCIATE DIRECTORS AND DIRECTORS THAT WERE
17 SCATTERED IN VARIOUS LEVELS ACROSS THE ORGANIZATION.

18 WHAT WE WANTED TO DO IN THIS PROJECT TOO
19 IS DETERMINE IF THERE'S ANY CHANGES THAT WERE
20 NECESSARY. WE WANTED TO BE TRANSPARENT AS TO WHAT
21 OUR PERFORMANCE EXPECTATIONS WERE FOR OUR EMPLOYEES.
22 WE WANTED TO TAKE A LOOK AT CAREER LADDERS AND BE
23 ABLE TO CLEARLY IDENTIFY THAT. WE WANTED TO LOOK AT
24 OPPORTUNITIES. AND WE REALLY WANTED TO DEVELOP
25 CONSISTENCIES ACROSS THE EXPECTATIONS FOR HOW WE

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1 DESCRIBE OUR POSITIONS. NEXT SLIDE PLEASE.

2 SO AS PART OF OUR SUMMARY HERE, AND I HAVE
3 TO COMPLIMENT HR STAFF AS WELL AS OUR LEADERS ACROSS
4 THE ORGANIZATION BECAUSE A TREMENDOUS AMOUNT OF
5 EFFORT WENT INTO REVIEWING ALL OUR LEVELS OF
6 POSITION ACROSS THE ORGANIZATION, AND THAT WITH
7 RESPECT TO WHAT ARE THE EXPECTATIONS OF THE ROLES.
8 WHAT ARE THE COMPETENCIES THAT WE WANT TO DEVELOP
9 AND HAVE REPRESENTED AND DEMONSTRATED IN THESE
10 POSITIONS? AND THEN HOW DO WE BENCHMARK THE
11 COMPENSATION AND MAKE ANY CORRECTIVE REASSIGNMENTS
12 THAT ARE NECESSARY?

13 WE REALLY ARE COMMITTING OURSELVES TO
14 ENSURE EVERY POSITION WITHIN THE ORGANIZATION HAD A
15 CLEAR JOB DESCRIPTION OR DUTY STATEMENT. WE
16 DEVELOPED BRAND-NEW COMPETENCIES, DETAILED
17 COMPETENCIES, FOR EVERYTHING FROM THE ASSOCIATE
18 DIRECTOR ABOVE BECAUSE THAT'S WHERE WE REALLY HAVE
19 CONSISTENCY ACROSS THE ORGANIZATION AND HOW WE TITLE
20 OUR POSITIONS. SO IT WAS IMPORTANT TO UNDERSTAND
21 WHAT CONSTITUTES AN ASSOCIATE DIRECTOR, WHAT
22 CONSTITUTES THE DIRECTOR VP, ET CETERA.

23 WE'VE THEN TAKEN THOSE DESCRIPTIONS AND
24 COMPETENCIES THAT WE'VE BEEN DEVELOPING AND PUT THIS
25 INTO A REVISED PERFORMANCE EVALUATION PROCESS. SO

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1 REALLY IT BECOMES A STANDARD BY WHICH EMPLOYEES ARE
2 NOW MEASURED SPECIFICALLY AGAINST THOSE
3 EXPECTATIONS.

4 SOME OF THE OTHER AREAS THAT WE DEVELOPED
5 OR HAD CONSISTENCIES AND CREATED IS WE REALIGNED THE
6 VP LEVEL SO THAT ALL VP'S WERE CAPTURED IN THE LEVEL
7 9. WHAT YOU WILL SEE, AND I'LL EXPLAIN A LITTLE
8 FURTHER IN A BIT, IS WHAT WE ARE RECOMMENDING OUR
9 COMPENSATION LEVELS RIGHT NOW ACROSS THE
10 ORGANIZATION ARE ONLY LEVELS 1 THROUGH 8. WE ARE
11 STILL RESERVING 9 AND 10 FOR SOME FURTHER
12 EVALUATION.

13 WE CREATED A BROADER SENIOR DIRECTOR
14 LEVEL. WHEN WE STARTED THIS PROJECT, WE HAD ONLY
15 ONE SENIOR DIRECTOR POSITION. BUT IN LOOKING ACROSS
16 THE ORGANIZATION AND LOOKING AT ADVANCEMENT
17 OPPORTUNITIES, WE REALIZED THAT A SENIOR DIRECTOR
18 LEVEL WAS NECESSARY TO CREATE A STEPWISE APPROACH
19 BETWEEN THE DIRECTOR AND THE VP LEVELS.

20 AND FINALLY, WE IN WORKING VERY CLOSELY
21 WITH OUR LEADERS AND WHAT I CALL OUR CORE PROGRAMS,
22 BUT WE BASICALLY WERE LOOKING AT REVIEW THERAPEUTICS
23 AND SCIENTIFIC PROGRAMS. WE CREATED A FELLOWSHIP
24 TRACK. AND WHAT THIS ALLOWS FOR IS MORE CAREER
25 ADVANCEMENTS ACROSS OUR CORE PROGRAMS TO ENABLE US

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1 TO HAVE A MANAGERIAL TRACK AS WELL AS AN INDIVIDUAL
2 CONTRIBUTOR TRACK. NEXT SLIDE PLEASE.

3 SO REALLY AS A PART OF THEN TAKING THIS
4 INTO OUR COMPENSATION REVIEW, WE RETAINED MORGAN HR.
5 AS MANY OF YOU NOTED, WE STARTED THIS PROJECT WITH
6 MERCER LAST YEAR. MERCER WAS UNABLE TO COMPLETE THE
7 CUSTOMIZED REVIEW OF OUR COMPENSATION. SO WE THEN
8 PIVOTED TO MORGAN HR, WHO HAS INCREDIBLE EXPERTISE
9 IN WORKING WITH I WOULD CALL UNIQUE ORGANIZATIONS
10 THAT ARE REALLY INDIVIDUALIZED IN THEIR APPROACH.
11 PART OF THE COMPANIES THAT THEY'VE WORKED WITH ARE
12 THE ACADEMY AWARDS, FOR EXAMPLE, THE PRO FOOTBALL
13 HALL OF FAME. SO THEY HAVE, AGAIN, AN EXPERTISE IN
14 LOOKING AT THE UNIQUENESS AND THEN PUTTING IT INTO
15 MORE OF THE STANDARDIZATION WHEN WE'RE LOOKING AT
16 VARIOUS COMPENSATION AND BENCHMARKING LEVELS. AND
17 WE BROUGHT THEM IN REALLY BECAUSE WE NEEDED TO
18 ENSURE THIS EXTERNAL COMPETITIVENESS AS WELL AS THE
19 INTERNAL QUALITY ACROSS OUR GROUP.

20 DID AN EXTENSIVE AMOUNT OF REVIEW IN ALL
21 OF OUR POSITIONS ACROSS OUR UNIQUE JOBS. AND EACH
22 JOB WAS INTERNALLY ALIGNED TO, FIRST, RADFORD'S
23 GLOBAL GRADE HIERARCHY BECAUSE IT'S IMPORTANT TO, IN
24 ORDER TO ESTABLISH OUR BENCHMARK POSITIONS ACROSS
25 THE ERI COMPENSATION DATA, WE NEED TO ENSURE THAT

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1 WE'RE CODING AND LOOKING TO THE GREATEST EXTENT WE
2 CAN LIKE-FOR-LIKE OPPORTUNITIES.

3 AS MANY OF YOU ARE ALSO AWARE, CIRM HAS A
4 UNIQUE OBLIGATION ACCORDING TO STATUTE TO BENCHMARK
5 OUR COMPENSATION AGAINST THE UC REGENT'S EDUCATIONAL
6 SYSTEM, SPECIFICALLY THE MEDICAL SCHOOLS, AS WELL AS
7 PRIVATE RESEARCH INSTITUTIONS WITHIN CALIFORNIA. SO
8 TO ACCOMPLISH THIS, MORGAN REACHED OUT OR COLLECTED
9 COMPENSATION INFORMATION FROM THOSE VARIOUS
10 ENTITIES.

11 WE THEN DETERMINED THAT THE, AND
12 CONCLUSION REALLY, WAS THAT A MAJORITY OF OUR
13 SALARIES WERE ALIGNED WITHIN THE SALARY RANGE DATA
14 BASED ON WHAT WE WERE FINDING. AND THE RANGES THAT
15 WE WERE PAYING WERE THE MARKET DATA FOR THE 25TH TO
16 THE 75TH PERCENTILE. AND WHY WE PICKED THOSE.
17 BECAUSE THEY WERE CONSISTENT WITH THE PERCENTILES
18 THAT THE BOARD HAD PREVIOUSLY APPROVED DURING OTHER
19 COMPENSATION REVIEWS. NEXT SLIDE PLEASE.

20 SO AS PART OF THE METHODOLOGY, AGAIN,
21 MORGAN WORKED WITH US IN CREATING AND DEVELOPING AND
22 GATHERING ALL OF OUR EXISTING JOB DESCRIPTIONS AND
23 TAKING A LOOK AT THAT ANALYSIS. THEY USED THE ERI
24 DATA TO TAKE A LOOK AT IT FROM A CODING PERSPECTIVE
25 AND THEN HOW WE COMPARED TO OTHER ORGANIZATIONS.

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1 AND THEN WE WERE ABLE TO DO OR MORGAN WAS ABLE TO
2 CREATE A MODIFICATION DEPENDING ON THE GEOGRAPHIC
3 LOCATION AND USED OAKLAND BECAUSE THAT WAS OUR
4 HEADQUARTERS AT THE TIME WE STARTED THIS REVIEW TO
5 TAKE A LOOK AT GEOGRAPHICALLY BENCHMARK THE DATA.

6 AS YOU KNOW, SPECIFICALLY FOR THE UC,
7 THERE IS A LOT OF FLEXIBILITY DEPENDING ON
8 GEOGRAPHIC LOCATION. SO IT WAS VERY IMPORTANT FOR
9 US AS AN ORGANIZATION, AS MOST OF OUR EMPLOYEES ARE
10 BASED IN THE BAY AREA, TO MAKE SURE OUR COMPENSATION
11 REFLECTED BAY AREA RATES.

12 SO AS YOU CAN SEE IN THE NEXT PART OF THE
13 SLIDE WHAT THEY WERE ABLE TO DO. SO THEY CUSTOMIZED
14 THE SURVEY, THEY LOOKED AT PUBLICLY AVAILABLE
15 INFORMATION, AND THEN COMPARED THAT TO THE ERI DATA
16 THAT THEY WERE SEEING. NEXT SLIDE PLEASE.

17 SO THEY CAME FORWARD WITH A PAY STRUCTURE
18 THAT RECOMMENDED OUR CURRENT PHILOSOPHY AND REALLY
19 AGAIN, AS I STATED BEFORE, THAT LOOKED TO REALLY
20 REFLECT WHAT CIRM'S COMPENSATION PHILOSOPHY WAS AND
21 HAS BEEN DETERMINED BEFORE. WE TOOK A LOOK AT THE
22 25TH TO THE 75TH PERCENTILES TO CALCULATE THE MINS
23 AND MAXES FOR EACH OF THE LEVELS.

24 NOW, HOW WE CREATE THE CIRM LEVELS AS AN
25 APPROACH TO THE INDIVIDUAL MARKET DATA IS WE TAKE

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1 ALL OF THOSE POSITIONS THAT ARE FOUND WITHIN A
2 PARTICULAR COMP LEVEL, WE TAKE THE MIN OF THE MIN
3 AND THE MAX OF THE MAX, AND THEN THAT'S THE BROAD
4 RANGE THAT YOU WILL SEE IN THE CIRM COMPENSATION
5 LEVELS. SO WE TOOK THIS INFORMATION, WE BROUGHT IT
6 BACK INTO THE ORGANIZATION. WE'VE BEEN WORKING WITH
7 ANOTHER EXTERNAL ADVISOR, TAMMI BUETTNER, WHO IS OUR
8 EXTERNAL HR CONSULTANT, MYSELF, AND MARIA AND WE
9 LOOKED ACROSS THE ORGANIZATION. AND ULTIMATELY WE
10 REVIEWED IT, WE APPROVED IT. THIS INFORMATION WAS
11 TAKEN TO THE GOVERNANCE SUBCOMMITTEE IN EARLY JULY
12 AND WAS APPROVED. THE COMPENSATION LEVELS WERE
13 APPROVED OR RECOMMENDED FOR APPROVAL AT THE
14 GOVERNANCE SUBCOMMITTEE.

15 IS THERE A NEXT SLIDE OR IS THIS THE LAST?
16 SO NEXT STEPS ARE RECOMMENDATIONS. SO WE'VE
17 IMPLEMENTED THE TITLE CHANGES AND RESPECTIVE GRADES.
18 WE WANT TO CONTINUE TO DEVELOP CORE JOB DESCRIPTIONS
19 FOR EACH OF THE POSITIONS, MAKING SURE EVERY TIME
20 THAT WE GO AND EITHER CREATE NEW JOBS OR LOOK TO
21 MODIFY DUTIES TO EXISTING JOBS, THAT WE HAVE
22 EXISTING DOCUMENTATION FOR THOSE. WE'RE GOING TO
23 CONTINUE TO REVIEW ALL OF OUR JOB GRADES AND MARKET
24 VALUES AT LEAST ANNUALLY TO MAKE SURE THAT WE'RE
25 FITTING WITHIN THE DESIRED PAY LEVELS.

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1 AGAIN, WE ARE GOING TO CONTINUE TO LOOK AT
2 THE MARKET, AND WE'RE GOING TO UTILIZE THIS
3 INFORMATION FROM A PAY EQUITY PERSPECTIVE
4 INTERNALLY. SO WE WANT TO ENSURE THAT OUR
5 COMPENSATION STRATEGIES ARE RELEVANT. IF WE DO HAVE
6 ANY PAY GAPS, THAT WE REDUCE THEM EFFECTIVELY AND
7 THAT WE HAVE NO DISPARATE IMPACTS ON EMPLOYEES AS A
8 RESULT OF ANY PAY INEQUITIES.

9 SO JUST AS A FINAL POINT, I KNOW SOME
10 QUESTIONS HAVE BEEN RAISED IN THE PAST ABOUT WHAT'S
11 THE IMPACT OF EMPLOYEES TO THIS. SO THERE'S REALLY
12 NO DETRIMENTAL IMPACT TO EMPLOYEES. NO EMPLOYEES'
13 SALARIES HAVE GONE DOWN AS A RESULT OF THIS. WE'RE
14 IN THE MIDST OF OUR PERFORMANCE EVALUATION AND
15 COMPENSATION REVIEW AT THIS CURRENT TIME. SO
16 THERE'S NO IMPACT, DOWNWARD IMPACT, TO EMPLOYEES.
17 MOST OR A MAJORITY OF OUR EMPLOYEES FALL WITHIN THE
18 RESPECTIVE SALARY RANGES. SO THAT'S A GOOD STEP,
19 THAT CIRM HAS BEEN MOVING IN LOCKSTEP WITH HOW THE
20 MARKET HAS BEEN PERFORMING WITH REGARD TO PAY.

21 SO AT THE END, WHAT I'LL BE ASKING FOR IS
22 A MOTION TO ACCEPT THE COMPENSATION LEVELS THAT
23 WE'LL BE RECOMMENDING. AND NOW I'LL ASK MARIANNE IF
24 SHE CAN DISPLAY THOSE. NOT THAT ONE. IT'S THE
25 OTHER ONE.

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1 IN THE MEANTIME WHILE SHE'S PULLING THAT
2 UP, ARE THERE ANY QUESTIONS ON THE PRESENTATION? I
3 DON'T SEE ANY. MARIA, DO YOU SEE ANY?

4 MS. BONNEVILLE: NO.

5 MR. MARKS: NO. THANK YOU.

6 SO AS YOU CAN SEE HERE, THERE'S SORT OF A
7 HEAD-TO-HEAD COMPARISON. ON THE LEFT-HAND SIDE WHAT
8 YOU SEE IS OUR EXISTING PAY RANGES FOR THE VARIOUS
9 LEVELS. AND ON THE RIGHT-HAND SIDE WHAT YOU SEE IS
10 THE MODIFIED VERSION THAT WE'RE ASKING FOR
11 RECOMMENDATION. NOW, AS I COMMENTED BEFORE, LEVELS
12 9 AND 10 WE'RE NOT AT THIS POINT PROPOSING ANY
13 ADDITIONAL CHANGES. THAT'S BECAUSE WE CONTINUE TO
14 PRESSURE TEST THE DATA THAT WE'VE RECEIVED AS A
15 RESULT OF THESE POSITIONS. THESE ARE UNIQUE
16 POSITIONS TO CIRM, AND WE WANT TO MAKE SURE THAT
17 WE'RE BENCHMARKING THEM ACCORDINGLY.

18 IN ADDITION, AT THE TIME WE WERE LOOKING
19 THROUGH THIS, WE WERE ALSO -- THE BOARD WAS ALSO
20 CONSIDERING THE SCOPE OF THE DUTIES FOR THE CHAIR
21 AND VICE CHAIR POSITIONS. AND WE WERE UNCERTAIN AS
22 TO WHERE THEY WOULD SLOT INTO THE LEVELS. NOW THAT
23 WE KNOW, BASED UPON THE DUTIES, THAT THEY WILL GO
24 INTO THE LEVEL 10 AND 9 POSITIONS, WE ARE TAKING
25 THAT, WE'RE TRYING TO BENCHMARK DATA ON THOSE

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1 POSITIONS, AND THEN INCORPORATE THOSE INTO THE
2 RANGES.

3 SO IN CONSULTATION WITH THE GOVERNANCE
4 SUBCOMMITTEE, WE MAKE THE RECOMMENDATION THAT WE
5 WILL CONTINUE TO LOOK AT THIS. WE EXPECT TO BE DONE
6 IN THE NEXT COUPLE WEEKS AND PRESENT IT TO THE NEXT
7 GOVERNANCE SUBCOMMITTEE MEETING IN EARLY SEPTEMBER
8 AND SUBSEQUENTLY TO THE BOARD AT THE END OF
9 SEPTEMBER.

10 SO AS YOU ALSO SEE THROUGH THE COMPARISON
11 THAT THE RANGES WERE NOT FAR OFF. THE MODIFIED
12 RANGES, TO A GREAT EXTENT, ARE VERY CONSISTENT WITH
13 THE PRIOR RANGES. WHAT WE ALSO WANTED TO DO TOO IS,
14 IF YOU NOTICE, BASICALLY IN MOST RANGES FROM 7 ON
15 DOWN, IS THAT YOU HAVE MULTIPLE NUMBERS IN EACH OF
16 THE RANGES. SO WHAT WE'VE DONE IS WE'VE CREATED
17 GREATER BREADTH WITHIN THE LEVELS, BUT WE HAVE JUST
18 CONSISTENT LEVELS FOR EACH OF THE RANGES WITH ONE
19 RANGE NUMBER INSTEAD OF MULTIPLE RANGE NUMBERS.

20 SO I BELIEVE THAT'S IT. SO, AGAIN, I WILL
21 TAKE ANY QUESTIONS. I SEE SENATOR TORRES.

22 MR. TORRES: YES. I JUST WANT TO THANK
23 YOU BECAUSE I KNOW WHAT YOU AND MARIA AND THE OTHERS
24 HAVE DONE. IT WAS AN ARDUOUS TASK. WE JUST WENT
25 THROUGH THAT, AS YOU KNOW, BECAUSE I'VE BEEN IN

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1 COMMUNICATION WITH YOU, AT THE UC ESPECIALLY IN
2 TERMS OF MEASURING CHANCELLOR SALARIES AS WELL AS
3 OTHER ACADEMICS. IT IS NOT AN EASY PROCESS. AND TO
4 GET THE RIGHT MIX OF CONSULTANTS TO HELP YOU LOOK AT
5 ALL THE PARAMETERS IS ALSO A CHALLENGE.

6 SO KUDOS TO YOU, KEVIN. AND KUDOS TO THE
7 FOLKS, MARIA B AND MARIA M AND OTHERS WHO
8 PARTICIPATED IN THE PROCESS. I'M GRATEFUL THAT I
9 DIDN'T HAVE TO DO IT TWICE.

10 DR. MARKS: THANK YOU, SENATOR TORRES.
11 MUCH APPRECIATED.

12 CHAIRMAN THOMAS: OKAY. KEVIN, CAN YOU
13 JUST AGAIN FRAME THE ASK ON THE MOTION PLEASE?

14 DR. MARKS: CERTAINLY. SO THE ASK, THE
15 STAFF RECOMMENDATION IS FOR A MOTION TO APPROVE THE
16 PROPOSED COMPENSATION LEVELS, THE CIRM COMPENSATION
17 LEVELS, WHICH WAS THE LAST DOCUMENT THAT YOU SAW.

18 MR. TORRES: SO MOVED.

19 CHAIRMAN THOMAS: MOVED BY SENATOR TORRES.
20 IS THERE A SECOND?

21 DR. BARRETT: SECOND.

22 CHAIRMAN THOMAS: KIM BEAT YOU TO IT
23 THERE, GEORGE.

24 ANY OTHER QUESTIONS OR COMMENTS BY MEMBERS
25 OF THE BOARD?

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1 MS. DURON: CAN I JUST ASK, KEVIN, ARE THE
2 ACTUALS BETWEEN THE TWO, THE MINIMUM AND THE MAX AT
3 THIS STAGE, THE ACTUAL AMOUNT THAT THESE VARIOUS
4 PEOPLE ARE GETTING? THEY'RE MINIMUM, ARE THEY, SO
5 THEY MIGHT BE GETTING MAX, WHICH IS COOL FOR THEM.

6 DR. MARKS: YES.

7 MS. DURON: BUT ARE WE LOOKING AT ANY
8 ACTUALS? BE NICE TO SEE ACTUALS ACTUALLY.

9 MR. MARKS: AS STATE EMPLOYEES, ALL OF OUR
10 EMPLOYEE SALARIES ARE PUBLIC INFORMATION. WE HAVE
11 NOT PRESENTED THAT. WE HAVE NOT PRESENTED THAT IN
12 THE PAST. WE ARE PERFECTLY ABLE TO PRESENT THAT TO
13 THE BOARD IF THE BOARD WISHES TO SEE THE
14 COMPENSATION LEVELS OF OUR EMPLOYEES. WE HAVE BEEN
15 MOVING. WHAT I SAID BEFORE IS THERE'S BEEN NO
16 DETRIMENTAL IMPACT ON EMPLOYEES AS A RESULT OF THESE
17 NEW RANGES.

18 WHAT WE DID IDENTIFY IS THAT WE HAD
19 CERTAIN EMPLOYEES THAT WERE PAID BELOW THE RANGES,
20 AND WE'RE MAKING THOSE CORRECTIVE ACTIONS TO ENSURE
21 THAT WE'RE PAYING COMPETITIVELY. SO REST ASSURED
22 THAT WE ARE SLOTTING EVERYONE WITHIN THE RESPECTIVE
23 SALARY RANGES FOR THEIR POSITIONS.

24 MS. DURON: I JUST THINK THAT WE DO HAVE
25 THE OPPORTUNITIES TO WORK WITH SOME PEOPLE, BUT NOT

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1 ALWAYS WITH ALL, AND WE OFTENTIMES VALUE THEM VERY
2 HIGHLY. AND WE WANT TO MAKE SURE THAT THEY ARE
3 GETTING WHAT THEY'RE WORTH. AND SO IT WAS JUST
4 CURIOSITY ON MY PART. THANK YOU. IT WAS A GOOD
5 CLARIFICATION.

6 DR. MARKS: YOU'RE WELCOME.

7 CHAIRMAN THOMAS: LARRY, THEN FRED.

8 MR. GOLDSTEIN: YEAH, I WANT TO ECHO ART
9 AND YSABEL, KEVIN. IT IS CRITICAL THAT WE MAKE SURE
10 THAT CIRM STAFF ARE PAID FAIRLY, PARTICULARLY WITH
11 RESPECT TO THE COST OF LIVING IN THE BAY AREA. OUR
12 ABILITY TO FUNCTION AT TOP QUALITY IS COMPLETELY
13 DEPENDENT ON THE QUALITY OF OUR STAFF. AND SO WE
14 WANT TO MAKE SURE THAT WE PAY THEM FAIRLY AND RETAIN
15 THEM WHEN THEY'RE AT THE QUALITY LEVEL WE EXPECT AND
16 HOPE FOR, WHICH GENERALLY THEY ARE. SO THANK YOU.

17 DR. MARKS: YOU'RE WELCOME.

18 DR. FISHER: SO IN ADDITION TO APPLAUDING
19 THE EFFORT, I'M WONDERING IF THE CHANGES IN
20 COMPENSATION THAT YOU'RE ANTICIPATING THAT ARE
21 APPROPRIATE, WHETHER THAT REQUIRES A CHANGE IN THE
22 BUDGET IN TERMS OF THE ANNUAL OPERATING BUDGET THAT
23 PERHAPS THIS BOARD PASSES. DOES IT REQUIRE AN
24 AMENDMENT TO THE BUDGET TO DEAL WITH THOSE CHANGES?

25 DR. MARKS: NO. SO WHAT WE DID IS WE HAD

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1 SOME PRELIMINARY DATA AS WE WERE PREPARING THE
2 BUDGET AND MADE CERTAIN ASSUMPTIONS. SO THOSE
3 ASSUMPTIONS TEND TO BE VALID, AND THE NUMBER THAT
4 WAS PUT FORTH FOR THE PERSONNEL INCREASE IN THE
5 CURRENT BUDGET WILL NOT CHANGE.

6 CHAIRMAN THOMAS: THANK YOU. BARRY.

7 DR. SELICK: THANKS, J.T. KEVIN, JUST A
8 FOLLOW-ON FROM THE POINT THAT YSABEL WAS MAKING. AM
9 I CORRECT IN ASSUMING THAT THERE MUST BE A
10 COMPENSATION SUBCOMMITTEE OF THE BOARD THAT DOES
11 ACTUALLY REVIEW THE SALARIES OF THE INDIVIDUAL
12 MEMBERS OF THE TEAM?

13 DR. MARKS: SO THERE'S CURRENTLY NOT A
14 COMPENSATION SUBCOMMITTEE. I BELIEVE, MARIA
15 BONNEVILLE, PLEASE CORRECT ME, THAT THERE USED TO BE
16 A COMPENSATION SUBCOMMITTEE. THAT TASK HAS BEEN
17 ABSORBED INTO THE GOVERNANCE SUBCOMMITTEE.

18 MS. BONNEVILLE: JUST A CORRECTION. THERE
19 WAS NO BOARD SUBCOMMITTEE, COMPENSATION
20 SUBCOMMITTEE. THERE WAS AN INTERNAL, INFORMAL
21 MEETING OF THE CHAIR AND THE PRESIDENT, AND THEY
22 WOULD REVIEW SALARIES TOGETHER. BUT IT WAS NOT A
23 SUBCOMMITTEE OF THE BOARD, JUST AS A CLARIFICATION.

24 DR. SELICK: JUST AS A SUGGESTION, A NICE
25 COMPROMISE MIGHT BE TO FORM A SMALL SUBCOMMITTEE OF

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1 THE BOARD SIMPLY BECAUSE THE RANGES, KEVIN, THAT YOU
2 PRESENTED ARE QUITE BROAD. AND IT MAY HELP TO HAVE
3 KIND OF A PSEUDO INDEPENDENT LOOK AT THE ACTUAL
4 SALARIES WITHIN THE RANGES JUST TO MAKE SURE THAT
5 THERE'S NOT SOME SORT OF UNCONSCIOUS BIAS, THAT SOME
6 PEOPLE TEND TO BE LOCATED TOWARDS THE LOWER END OF
7 THE RANGE AND OTHERS TEND TO BE IN THE UPPER END OF
8 THE RANGE. AND AN INDEPENDENT SUBCOMMITTEE OF THE
9 BOARD COULD BE USEFUL IN HELPING SORT THAT OUT.

10 CHAIRMAN THOMAS: OKAY. THANK YOU FOR
11 THAT SUGGESTION, BARRY. WE'LL DISCUSS THAT.

12 ANY OTHER QUESTIONS BY MEMBERS OF THE
13 BOARD? ANY COMMENTS FROM MEMBERS OF THE PUBLIC?

14 MS. BONNEVILLE: I DO NOT SEE ANY.

15 CHAIRMAN THOMAS: HEARING NONE, MARIA,
16 WILL YOU PLEASE CALL THE ROLL.

17 MS. BONNEVILLE: HAIFAA ABDULHAQ.

18 DR. ABDULHAQ: YES.

19 MS. BONNEVILLE: MOHAMMED ABOUSALEM.

20 DR. ABOUSALEM: YES.

21 MS. BONNEVILLE: KIM BARRETT.

22 DR. BARRETT: AYE.

23 MS. BONNEVILLE: GEORGE BLUMENTHAL.

24 DR. BLUMENTHAL: YES.

25 MS. BONNEVILLE: MICHAEL BOTCHAN. LINDA

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1 BOXER.
2 DR. BOXER: YES.
3 MS. BONNEVILLE: LEONDR A CLARK-HARVEY.
4 DR. CLARK-HARVEY: YES.
5 MS. BONNEVILLE: ANNE-MARIE DULIEGE.
6 DR. DULIEGE: YES.
7 MS. BONNEVILLE: YSABEL DURON.
8 MS. DURON: YES.
9 MS. BONNEVILLE: MARK FISCHER-COLBRIE.
10 DR. FISCHER-COLBRIE: YES.
11 MS. BONNEVILLE: FRED FISHER.
12 DR. FISHER: YES.
13 MS. BONNEVILLE: ELENA FLOWERS.
14 DR. FLOWERS: YES.
15 MS. BONNEVILLE: JUDY GASSON.
16 DR. GASSON: YES.
17 MS. BONNEVILLE: LARRY GOLDSTEIN.
18 DR. GOLDSTEIN: YES.
19 MS. BONNEVILLE: DAVID HIGGINS.
20 DR. HIGGINS: YES.
21 MS. BONNEVILLE: RICH LAJARA.
22 MR. LAJARA: YES.
23 MS. BONNEVILLE: PAT LEVITT.
24 DR. LEVITT: YES.
25 MS. BONNEVILLE: DAVID LO.

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1 DR. LO: YES.
2 MS. BONNEVILLE: LINDA MALKAS.
3 DR. MALKAS: YES.
4 MS. BONNEVILLE: SHLOMO MELMED. CHRISTINE
5 MIASKOWSKI. LAUREN MILLER-ROGEN.
6 MS. MILLER-ROGEN: YES.
7 MS. BONNEVILLE: ADRIANA PADILLA.
8 DR. PADILLA: YES.
9 MS. BONNEVILLE: AL ROWLETT.
10 MR. ROWLETT: YES.
11 MS. BONNEVILLE: BARRY SELICK.
12 DR. SELICK: YES.
13 MS. BONNEVILLE: MARVIN SOUTHARD.
14 DR. SOUTHARD: YES.
15 MS. BONNEVILLE: MICHAEL STAMOS. JONATHAN
16 THOMAS.
17 CHAIRMAN THOMAS: YES.
18 MS. BONNEVILLE: ART TORRES.
19 MR. TORRES: AYE.
20 MS. BONNEVILLE: KRISTINA VUORI.
21 DR. VUORI: YES.
22 MS. BONNEVILLE: THE MOTION CARRIES.
23 CHAIRMAN THOMAS: THANK YOU, MARIA. THANK
24 YOU, KEVIN AND TEAM, FOR ALL YOUR HARD WORK. WE
25 LOOK FORWARD TO COMPLETING THE TOPIC WHEN WE GET THE

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1 DATA FOR THE LEVELS 9 AND 10, AS YOU SAY, IN THE
2 NEXT FEW WEEKS.

3 I'M GOING TO CIRCLE BACK. WE HAVE ONE
4 CONSENT ITEM WHICH WAS THE APPROVAL OF THE MINUTES
5 FOR THE JUNE 23D ARS AND THE JUNE 27TH ICOC. DOES
6 ANYBODY WANT TO TAKE THAT ITEM OUT OF THE CONSENT
7 AGENDA? HEARING NONE, DO WE HAVE A MOTION TO
8 APPROVE?

9 DR. ABOUSALEM: I MAKE THE MOTION.

10 CHAIRMAN THOMAS: THANK YOU, MOHAMMED. IS
11 THERE A SECOND?

12 DR. HIGGINS: SECOND.

13 CHAIRMAN THOMAS: OKAY. ANY QUESTIONS OR
14 COMMENTS BY MEMBERS OF THE BOARD? ANY PUBLIC
15 COMMENT?

16 MS. BONNEVILLE: NO.

17 CHAIRMAN THOMAS: MARIA, WILL YOU PLEASE
18 CALL THE ROLL.

19 MS. BONNEVILLE: SURE. HAIFAA ABDULHAQ.

20 DR. ABDULHAQ: YES.

21 MS. BONNEVILLE: MOHAMMED ABOUSALEM.

22 DR. ABOUSALEM: YES.

23 MS. BONNEVILLE: KIM BARRETT.

24 DR. BARRETT: AYE.

25 MS. BONNEVILLE: GEORGE BLUMENTHAL.

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1 DR. BLUMENTHAL: YES.
2 MS. BONNEVILLE: LINDA BOXER.
3 DR. BOXER: YES.
4 MS. BONNEVILLE: LEONDRA CLARK-HARVEY.
5 DR. CLARK-HARVEY: YES.
6 MS. BONNEVILLE: ANNE-MARIE DULIEGE.
7 DR. DULIEGE: YES.
8 MS. BONNEVILLE: YSABEL DURON.
9 MS. DURON: YES.
10 MS. BONNEVILLE: MARK FISCHER-COLBRIE.
11 DR. FISCHER-COLBRIE: YES.
12 MS. BONNEVILLE: FRED FISHER.
13 DR. FISHER: YES.
14 MS. BONNEVILLE: ELENA FLOWERS.
15 DR. FLOWERS: YES.
16 MS. BONNEVILLE: JUDY GASSON.
17 DR. GASSON: YES.
18 MS. BONNEVILLE: LARRY GOLDSTEIN.
19 DR. GOLDSTEIN: YES.
20 MS. BONNEVILLE: DAVID HIGGINS.
21 DR. HIGGINS: YES.
22 MS. BONNEVILLE: RICH LAJARA.
23 MR. LAJARA: YES.
24 MS. BONNEVILLE: PAT LEVITT.
25 DR. LEVITT: YES.

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1 MS. BONNEVILLE: DAVID LO.
2 DR. LO: YES.
3 MS. BONNEVILLE: LINDA MALKAS.
4 DR. MALKAS: YES.
5 MS. BONNEVILLE: SHLOMO MELMED. CHRISTINE
6 MIASKOWSKI. LAUREN MILLER-ROGEN.
7 MS. MILLER-ROGEN: YES.
8 MS. BONNEVILLE: ADRIANA PADILLA.
9 DR. PADILLA: YES.
10 MS. BONNEVILLE: AL ROWLETT.
11 MR. ROWLETT: YES.
12 MS. BONNEVILLE: BARRY SELICK.
13 DR. SELICK: ABSTAIN. I WASN'T AT THE
14 MEETING.
15 MS. BONNEVILLE: MARVIN SOUTHARD.
16 DR. SOUTHARD: YES.
17 MS. BONNEVILLE: MICHAEL STAMOS. JONATHAN
18 THOMAS.
19 CHAIRMAN THOMAS: YES.
20 MS. BONNEVILLE: ART TORRES.
21 MR. TORRES: AYE.
22 MS. BONNEVILLE: KRISTINA VUORI.
23 DR. VUORI: YES.
24 MS. BONNEVILLE: THE MOTION CARRIES.
25 CHAIRMAN THOMAS: THANK YOU, MARIA. THAT

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1 CONCLUDES THE ACTION ITEM AGENDA. WE ARE NOW INTO
2 GENERAL PUBLIC COMMENT. ARE THERE ANY GENERAL
3 PUBLIC COMMENTS ON ANY TOPICS OF INTEREST?

4 MS. BONNEVILLE: I HAVE -- GO AHEAD,
5 DAVID.

6 DR. HIGGINS: MARIA, I WANTED TO ASK A
7 QUICK QUESTION. HOW IS THE NEW FACILITY COMING
8 ALONG? JUST CURIOUS, JUST A CURIOSITY QUESTION.
9 HOW'S THE NEW SPACE?

10 DR. MILLAN: THAT'S FOR ME, MARIA.

11 MS. BONNEVILLE: I CAN'T ANSWER THAT.

12 DR. MILLAN: I'M GOING TO DEFLECT THIS TO
13 KEVIN MARKS WHO'S ALSO IN CHARGE OF OUR FACILITIES
14 PLANNING. KEVIN.

15 DR. MARKS: I DO APOLOGIZE. I WAS DOING
16 SOME INTERNAL COMMUNICATIONS HERE, AND I MISSED THE
17 QUESTION. SO CAN YOU PLEASE REPEAT?

18 DR. HIGGINS: HOW ARE THINGS GOING WITH
19 THE MOVE?

20 DR. MARKS: GOOD QUESTION. THANKS FOR
21 THAT. THEY ARE MOVING ALONG. WE HAVE AN IN-DEPTH
22 PROJECT TEAM NOW WITH RESPECT TO TGS INTERNAL STAFF.
23 OUR CONTRACTORS ARE ON BOARD. I HAVE A MEETING
24 ACTUALLY THIS AFTERNOON TO MORE CLEARLY UNDERSTAND
25 AND GET A COMPLETE ARTICULATION OF OUR TIMELINE.

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1 BUT, AGAIN, WE CONTINUE TO MOVE FORWARD.

2 IN THE INTERIM WHAT WE'VE DONE, HOWEVER,
3 IS CREATED MORE TEMPORARY SPACE ALMOST THROUGHOUT
4 THE BAY AREA. SO WE HAVE TEMPORARY WORK SPACES
5 RESERVED IN OAKLAND. I'M CURRENTLY SITTING WITH
6 MARIANNE AND BEN HERE IN GATEWAY COMPLEX IN WHAT'S
7 CALLED THE LIGHTHOUSE. AND WE HAVE SPACE RESERVED
8 ON A WEEKLY BASIS THERE FOR EMPLOYEE GROUPS TO GET
9 TOGETHER AND MEET. WHAT WE ARE TRYING TO DO IS
10 PHASE IN OUR RETURN TO OFFICE SO IT'S NOT JUST AN
11 ABRUPTNESS AND GET PEOPLE USED TO ACTUALLY COMING IN
12 AND WORKING WITH EACH OTHER ON A MORE REGULAR BASIS.
13 SO WE'LL CONTINUE IN THAT STRUCTURE UNTIL OUR
14 BUILD-OUT IS COMPLETE.

15 WE DID HAVE PLANS FOR PARTIAL OCCUPANCY OF
16 THE FLOOR WHILE CONSTRUCTION WAS STILL TAKING PLACE.
17 WE'RE STILL IN CONVERSATIONS WITH THE LANDLORD
18 AROUND THAT, AND WE'RE HOPING THAT STILL IS A
19 FEASIBLE OPTION. IT'S LOOKING A BIT MORE DOUBTFUL
20 WITH THAT FROM A RISK PERSPECTIVE, BUT WE ARE DOING
21 EVERYTHING TO ENSURE THAT WE ARE BRINGING EMPLOYEES
22 TOGETHER MORE FREQUENTLY, BUILDING THAT
23 COLLABORATIVE WORK ENVIRONMENT UNTIL THE OFFICE IS
24 COMPLETE. PROBABLY MORE THAN YOU WANTED TO KNOW,
25 BUT HERE YOU ARE.

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1 DR. HIGGINS: THANK YOU. THANK YOU VERY
2 MUCH. APPRECIATE THAT.

3 CHAIRMAN THOMAS: MARIA, ANY PUBLIC
4 COMMENT?

5 MS. BONNEVILLE: I HAVE TWO NOTES TO
6 SHARE. SO THE FIRST ONE IS FROM DON REED. "ICOC
7 PUBLIC COMMENT. AS AN INVOLVED MEMBER OF THE
8 PUBLIC, I NATURALLY SUPPORT THE GREAT WORK BEING
9 DONE BY THE CALIFORNIA INSTITUTE FOR REGENERATIVE
10 MEDICINE. ACCORDINGLY, I AM CONCERNED ABOUT THE
11 RECENT RETURN OF THE PERSONHOOD MOVEMENT WHICH
12 DIRECTLY THREATENS EMBRYONIC STEM CELL RESEARCH.
13 PERSONHOOD WAS DEFINED AS A FERTILIZED EGG OR
14 BLASTOCYTE AS A FULL HUMAN BEING UNDER LAW.

15 "OPPONENTS HAVE OFTEN STATED THEIR INTENT
16 TO CRIMINALIZE EMBRYONIC STEM CELL RESEARCH DIRECTLY
17 OR INDIRECTLY. A RECENT FEDERAL BILL, THE LIVELY
18 CONCEPTION ACT, WOULD, 'EXTEND TO EMBRYOS
19 CONSTITUTIONAL RIGHT TO LIFE BEGINNING AT THE MOMENT
20 OF FERTILIZATION THIS BILL HAS BEEN READ TWICE AND
21 REFERRED TO THE JUDICIARY COMMITTEE. IT HAS 164
22 CO-SPONSORS IN THE U.S. HOUSE OF REPRESENTATIVES.

23 "THAT BILL DOES NOT MENTION STEM CELL
24 RESEARCH DIRECTLY, BUT IT DOES NOT HAVE TO. IF A
25 FERTILIZED EGG IS DECLARED A HUMAN BEING WITH ALL

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1 RIGHTS AND PROTECTIONS, RESEARCH INVOLVING
2 BLASTOCYTES MUST BE CONSIDERED AT RISK.

3 "IT IS TO BE HOPED THAT CALIFORNIA'S RIGHT
4 TO RESEARCH IS SAFE ENSCONCED AS IT IS WITHIN OUR
5 STATE'S CONSTITUTION. BUT I ALSO REMEMBER WHEN CIRM
6 WAS SUED BY AN ALLEGED EMBRYO TITLED JANE DOE. THAT
7 SO-CALLED INDIVIDUAL WAS FOUND BY THE JUDGE TO HAVE
8 NO STANDING IN THE CASE, BUT WE LIVE IN DIFFERENT
9 TIMES TODAY.

10 "I REALIZE THAT CIRM ITSELF AS A STATE
11 AGENCY CAN TAKE NO POLITICAL ACTION; HOWEVER,
12 EVERYONE HERE IS AN INDIVIDUAL AT THE TOP OF YOUR
13 FIELD AND WITH CIRCLES OF INFLUENCE. IT MIGHT BE
14 IMPORTANT TO ACQUAINT YOURSELF WITH AN ISSUE WHICH
15 IN MY OPINION THREATENS THE RESEARCH WE ALL SUPPORT.
16 THANK YOU. DON REED."

17 CHAIRMAN THOMAS: THANK YOU, DON. I'M
18 SURE YOU'RE LISTENING, NOT JUST FOR THIS VERY
19 IMPORTANT COMMENT, BUT FOR YOUR INCREDIBLE SUPPORT
20 THROUGHOUT THE YEARS. YOU'VE BEEN OUR STAUCHEST
21 FAN OUT THERE, AND WE SO APPRECIATE YOUR ATTENTION
22 AND ALL THE GREAT POINTS YOU'VE MADE. SO THANK YOU
23 VERY MUCH FOR THAT.

24 MS. BONNEVILLE: WE HAVE ONE MORE. IT'S
25 FROM DAVID JENSEN. "WHEN DOES CIRM INTEND TO BEGIN

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1 TO ADDRESS PUBLICLY THE ETHICAL, FINANCIAL, AND
2 OTHER ISSUES RELATED TO THE ORCHARD THERAPEUTICS
3 ABANDONMENT OF THE ADA-SCID TRIAL THAT WAS BEING
4 FINANCED BY CIRM? IT SEEMS THAT THIS SITUATION
5 COULD EASILY OCCUR AGAIN GIVEN THE NATURE OF THE
6 SO-CALLED ONE AND DONE TREATMENTS FOR RARE
7 DISEASES."

8 CHAIRMAN THOMAS: SO IT'S GENERALLY OUR
9 POLICY NOT TO ENGAGE IN Q & A IN PUBLIC COMMENT, BUT
10 I AM GOING ON THIS PARTICULAR MATTER TO ASK KEVIN
11 MARKS IF HE WOULD RESPOND TO THAT QUESTION.

12 DR. MARKS: SURE. THANK YOU, MR.
13 CHAIRMAN. THIS PARTICULAR SITUATION, I THINK, IS
14 ONE IN WHICH IT DEMONSTRATES THE INDIVIDUAL
15 CIRCUMSTANCES OF EACH OF THE OPPORTUNITIES THAT GET
16 PRESENTED TO US. THIS WAS A SITUATION WHERE ORCHARD
17 DECIDED TO DISCONTINUE A DEVELOPMENT PROGRAM IN
18 RELATION TO A THERAPY THAT HAD BEEN FUNDED AND
19 CREATED AT UCLA AND OUT-LICENSED TO ORCHARD.

20 I THINK IN THIS PARTICULAR SITUATION, WHAT
21 WE HAD AT OUR DISPOSAL WAS THE ABILITY TO WORK WITH
22 ORCHARD AND UCLA TO GET THE THERAPY RETURNED TO UCLA
23 AND REINSERTED INTO A CLINICAL TRIAL SO THAT WE CAN
24 CONTINUE OR ASSIST UCLA IN THE CONTINUANCE OF THE
25 AVAILABILITY OF THIS THERAPY.

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1 I THINK IT'S VERY DIFFICULT FOR US IN
2 DEVELOPING A SORT OF PUBLIC PRONOUNCEMENT OF WHAT WE
3 WILL DO IN EACH AND EVERY SITUATION BECAUSE, AGAIN,
4 EVERYTHING IS UNIQUE. WE HAVE VARIOUS TOOLS AT OUR
5 DISPOSAL, ONE OF WHICH IS MARCH-IN RIGHTS IN
6 PARTICULAR SITUATIONS. BUT I THINK IT'S IMPORTANT
7 THAT WE JUST HAVE TO ENSURE THAT, WHEN WE SEE VIABLE
8 OPPORTUNITIES AND VIABLE THERAPIES THAT POTENTIALLY
9 DON'T HAVE COMMERCIAL OPPORTUNITIES AND ARE GOING TO
10 BE ABANDONED BY OUR PARTNERS, TO ENSURE THAT THEY
11 HAVE ANOTHER PATHWAY BACK.

12 AGAIN, WE HAVE TO LOOK AT EACH SITUATION
13 TO DETERMINE WHAT THAT VIABLE PATHWAY IS AND HOW DO
14 WE CONTINUE THE ADVANCEMENT OF THESE THERAPIES. SO
15 REALLY IT'S UP TO THE BOARD TO DECIDE WHETHER IT
16 WANTS TO LOOK AND SEE IF WE CAN DEVELOP OVERALL
17 STANDARDS. WHERE I SIT HERE, AGAIN, I THINK IT'S
18 ALL DEPENDING ON THE INDIVIDUAL CIRCUMSTANCES OF
19 EACH OF THE OPPORTUNITIES.

20 CHAIRMAN THOMAS: OKAY. THANK YOU, KEVIN,
21 FOR THAT ANSWER.

22 MARIA, ANY OTHER PUBLIC COMMENT?

23 MS. BONNEVILLE: NO, OTHER THAN A REMINDER
24 THAT WE HAVE AN APPLICATION REVIEW SUBCOMMITTEE ON
25 AUGUST 30TH FOR THOSE OF YOU WHO ARE MEMBERS AND FOR

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1 OTHER BOARD MEMBERS TOO IF THEY JUST WANT TO LISTEN
2 IN.

3 CHAIRMAN THOMAS: AND THE NEXT FULL BOARD
4 MEETING, I BELIEVE, IS SEPTEMBER 29.

5 MS. BONNEVILLE: OKAY. THAT SOUNDS GOOD.

6 MS. DEQUINA-VILLABLANCA: YES.

7 CHAIRMAN THOMAS: YES. THANK YOU.

8 AND LASTLY, WHILE WE'RE IN THE COMMENT
9 PERIOD, I WONDERED IF AL, KRISTINA, OR ANYBODY ELSE
10 WOULD LIKE TO COMMENT ON NATIONAL LEAGUE WEST
11 STANDINGS AT THIS POINT?

12 MR. ROWLETT: I OBJECT TO THE CHAIR'S
13 ASSERTION THERE AND WOULD RESPECTFULLY REQUEST THAT
14 HE RECUSE HIMSELF FROM ANY OTHER COMMENTS ABOUT
15 MAJOR LEAGUE BASEBALL.

16 DR. VUORI: I FULLY SUPPORT WHAT AL JUST
17 SAID ON BEHALF OF EVERYBODY IN SAN DIEGO. I THINK
18 THAT'S ONLY FAIR.

19 CHAIRMAN THOMAS: WELL, THANK YOU. ON
20 THAT NOTE, EVERYBODY, THANK YOU VERY MUCH FOR --

21 DR. FISHER: I'D KIND OF LIKE TO HEAR MORE
22 OF WHAT THE CHAIR IS THINKING.

23 CHAIRMAN THOMAS: WELL, FRED, YOU'RE IN
24 LOS ANGELES. YOU'RE ON MY SIDE.

25 MR. TORRES: OFFLINE. OFFLINE. THANK

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1 YOU.

2 MS. BONNEVILLE: MANY THANKS TO MARIANNE
3 AND DOUG FOR ALL THEIR HELP TODAY. SO I APPRECIATE
4 IT.

5 MR. TORRES: HERE. HERE.

6 CHAIRPERSON DURON: THANK YOU VERY MUCH.
7 THANK YOU TO EVERYBODY FOR A VERY PRODUCTIVE
8 MEETING.

9 MR. TORRES: KEVIN, BE SURE TO RECYCLE AND
10 COMPOST.

11 CHAIRMAN THOMAS: THANK YOU. WE WILL SEE
12 EVERYBODY IN THE EITHER AUGUST OR SEPTEMBER FULL
13 BOARD MEETING. WITH THAT, WE STAND ADJOURNED.
14 THANK YOU.

15 (THE MEETING WAS THEN CONCLUDED AT 12:36
16 P.M.)

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REPORTER'S CERTIFICATE

I, BETH C. DRAIN, A CERTIFIED SHORTHAND REPORTER IN AND FOR THE STATE OF CALIFORNIA, HEREBY CERTIFY THAT THE FOREGOING TRANSCRIPT OF THE VIRTUAL PROCEEDINGS BEFORE THE INDEPENDENT CITIZEN'S OVERSIGHT COMMITTEE AND THE APPLICATION REVIEW SUBCOMMITTEE OF THE CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE IN THE MATTER OF ITS REGULAR MEETING HELD ON JULY 28, 2022, WAS HELD AS HEREIN APPEARS AND THAT THIS IS THE ORIGINAL TRANSCRIPT THEREOF AND THAT THE STATEMENTS THAT APPEAR IN THIS TRANSCRIPT WERE REPORTED STENOGRAPHICALLY BY ME AND TRANSCRIBED BY ME. I ALSO CERTIFY THAT THIS TRANSCRIPT IS A TRUE AND ACCURATE RECORD OF THE PROCEEDING.

BETH C. DRAIN, CA CSR-7152
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